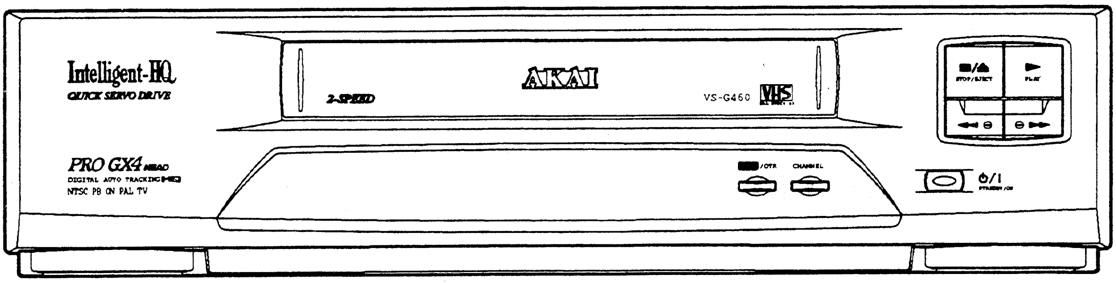
VS-G260,G270 series

AKAI SERVICE MANUAL


Intelligent-HQ
QUICK SERVO DRIVE
2-SPEED
AKAI
VS-G460
VHS
PRO GX4 HEAD
DIGITAL AUTO TRACKING HQ
NTSC PB ON PAL TV
CHANNEL
STOP/EJECT
PLAY
⏻/I

MODEL VS-G460EA

HQ HIGH QUALITY
VHS PAL SECAM

SHOWVIEW G-CODE

VIDEOplus+

VIDEO CASSETTE RECORDER

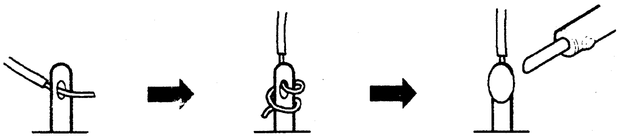
MODEL VS-G260EA/EDG/EK/EOH/EM/ES/SEG
MODEL VS-G261EOH,G262EOH,G263EOH
MODEL VS-G265EA/EDG/EOH/EM/SEG
MODEL VS-G267EOG/EOH
MODEL VS-G270EK/EOH/SEG,G271EK
MODEL VS-G275,G276EOH,~~G277~~EOG
MODEL VS-G460EA/EDG/EM/SEG
MODEL VS-G465EA/EDG/EOH/SEG,G467EOH
MODEL VS-G470EK/SEG,G475EOH
MODEL VS-G477EOG

Klar

★ SAFETY INSTRUCTIONS

PRECAUTIONS DURING SERVICING

1. Parts identified by the ⚠ symbol are critical for safety. Replace them only with the parts number specified.
2. In addition to safety, other parts and assemblies are specified for conformance with such regulations as those applying to spurious radiation. These must also be replaced only with the specified replacements.
   Examples: RF converters, tuner units, antenna selector switches, RF cables, noise blocking capacitors, noise blocking filters, etc.
3. Use specified internal wiring. Note especially:
   1) Wires covered with PVC tubing
   2) Double insulated wires
   3) High voltage leads
4. Use specified insulating materials for hazardous live parts.
   Note especially:
   1) Insulation Tape
   2) PVC tubing
   3) Spacers (insulating barriers)
   4) Insulation sheets for transistors
   5) Plastic screws for fixing micro switches
5. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.), wrap the ends of the wires securely around the terminals before soldering.



6. Make sure that wires do not contact heat producing parts (heat sinks, oxide metal film resistors, fusible resistors, etc.).
7. Check that replaced wires do not contact sharp edged or pointed parts.
8. Also check areas surrounding repaired locations.
9. Make sure that foreign objects (screws, solder droplets, etc.) do not remain inside the set.

SAFETY CHECK AFTER SERVICING

After servicing, make measurements of leakage-current or resistance in order to determine that exposed parts are acceptably insulated from the supply circuit.
The leakage-current measurement should be done between accessible metal parts (such as chassis, ground terminal, microphone jacks, signal input/output connectors, etc.) and the earth ground through a resistor of 1500 ohms paralleled with a 0.15 μF capacitor, under the unit's normal working conditions.
The leakage-current should be less than 0.5 mA rms AC.
The resistance measurement should be done between accessible exposed metal parts and power cord plug prongs with the power switch (if included) "ON". The resistance should be more than 2.2 M ohms.

MAKE YOUR CONTRIBUTION TO PROTECT THE ENVIRONMENT

Used batteries with the ISO symbol for recycling as well as small accumulators (rechargeable batteries), mini-batteries (cells) and starter batteries should not be thrown into the garbage can.
Please leave them at an appropriate depot.

★ SPECIFICATIONS (AKAI brand models only)

Format	VHS standard
Video recording system	Rotary, slant azimuth two-head helical scan system
Rotary heads	
VS-G260~G277	2 video heads
VS-G460~G477	4 video heads
RF input	
EA	System B,G VHF:ch 0 - 5, 5A, 6 - 11, UHF:ch 21 - 69
EDG	System D,K VHF:ch 1 - 12, UHF:ch 21 - 69 System B,G VHF:ch 2 - 12, UHF:ch 21 - 69 Cable:ch S1' - S3', S1 - S41
EK	System I UHF:ch 21 - 69
EM	System B,G (PAL, SECAM) VHF:ch 2 - 12, UHF:ch 21 - 69
EOG/EOH	System B,G (PAL, SECAM) VHF:ch 2 - 4, 5 - 12, UHF:ch 21 - 69 Cable:ch S1' - S3', S1 - S41
ES	System I (PAL, SECAM) VHF:ch 2 - 12, UHF:ch 21 - 69, VHF:ch 4 - 13 (South Africa)
SEG	System L VHF:ch B - C2, 1 - 6, UHF:ch 21 - 69 Cable:ch B - Q System B,G VHF:ch 2 - 12, UHF:ch 21 - 69 Cable:ch S1' - S3', S1 - S41
RF output	
EA	System B type modulation VHF ch 0, 1 switchable (preset: ch 1)
EDG	System K/G type modulation UHF ch 30 - 39 adjustable (preset: ch 36)
EK	System I type modulation UHF ch 30 - 39 adjustable (preset: ch 35)
EM	System B type modulation VHF ch 3, 4 switchable (preset: ch 4)
EOG/EOH	System G type modulation UHF ch 30 - 39 adjustable (preset: ch 36)
ES	System I type modulation UHF ch 30 - 39 adjustable (preset: ch 36)
Recording (line input)	
EA/EK	PAL
EDG/EM/ES	PAL SECAM (recorded as MESECAM) NTSC 3.58/4.43
EOG/EOH	PAL SECAM (recorded as MESECAM)
SEG	SECAM, PAL (MESECAM)
Playback (line output)	
EA	PAL NTSC 4.43 (NTSC tape) Simulated PAL (NTSC tape)
EDG/EM/ES	PAL SECAM (MESECAM tape) NTSC 4.43 (NTSC tape) Simulated PAL (NTSC tape)
EK	PAL Simulated PAL (NTSC tape)
EOG/EOH	PAL SECAM (MESECAM tape) Simulated PAL (NTSC tape)
SEG	SECAM/PAL (MESECAM) Simulated PAL (NTSC tape)

Video	
Line input level	0.5-2.0 Vp-p/75 ohms, unbalanced
Line output level	1.0 Vp-p/75 ohms, unbalanced
S/N ratio	More than 45 dB
Horizontal resolution	More than 250 lines (PAL) More than 220 lines (SECAM/SEG model only)
Audio	
Line input level	–6 dBs/50 k ohms, unbalanced
Line output level	–6 dBs/1 k ohms, unbalanced
S/N ratio	More than 40 dB
Frequency response	70 - 8,000 Hz
Recording/Playback time	
VS-G260SEG,260,261,263,267,275EOH,265EA/SEG,267EOG	
CCIR	240 min. with E-240 cassette
NTSC (playback only)	160 min. with T-160 cassette
EDG/EM/ES models	
CCIR	240 min. with E-240 cassette in SP mode 480 min. with E-240 cassette in LP mode
NTSC	160 min. with T-160 cassette in SP mode 480 min. with T-160 cassette in EP mode
Except above models	
CCIR	240 min. with E-240 cassette in SP mode 480 min. with E-240 cassette in LP mode
NTSC (playback only)	160 min. with T-160 cassette in SP mode 480 min. with T-160 cassette in EP mode
Tape speed	
VS-G260SEG,260,261,263,267,275EOH,265EA/SEG,267EOG	
CCIR	23.39 mm/sec.
NTSC	33.35 mm/sec.
Except above models	
CCIR	23.39 mm/sec. in SP mode 11.695 mm/sec. in LP mode
NTSC	33.35 mm/sec. in SP mode 11.12 mm/sec. in EP mode
Quick finder	
CCIR	7 times normal speed in SP or LP modes
NTSC	5 times normal speed in SP or EP modes
FF, RWD time	Approx.150 sec. with E-180 cassette
Timer	
Program	8 programs/1 year and OTR
Clock reference	Quartz crystal
Display	TV screen & FLD (tape counter, timer etc.)
Power requirement	
EDG	220-240 V AC, 50/60 Hz
EM	110-240 V AC, 50/60 Hz
Except EDG/EM	220-240 V AC, 50 Hz
Power consumption	
EA/EM/ES	15 W
EDG/EK,263,267,465,467,475EOH, 267,477EOG	16 W
SEG,260,261,262,265,270,275,276EOH, 277EOG	17 W
Operating temperature	5 °C - 40 °C
Dimensions	380 (W) x 93 (H) x 270 (D) mm
Weight	3.4 kg

Standard accessories

AC power cord	1
Antenna cord	1
Remote control unit	1
Batteries for remote control	2
AC plug adaptor	
CCT5902-0701	1 (G240EM(Y7),440EOG only)
ECP-L01BK-R5	1 (G245,246,445EK only)
Operator's manual	1

0 dBs = 0.775 VRMS

* For improvement purposes, specifications and design are subject to change without notice.
* VIDEO PLUS+ AND PLUSCODE ARE TRADEMARKS APPLIED FOR BY GEMSTAR DEVELOPMENT CORP. VIDEO PLUS+ SYSTEM IS MANUFACTURED UNDER LICENCE FROM GEMSTAR DEVELOPMENT CORPORATION.
* SHOWVIEW IS A TRADEMARK APPLIED FOR BY GEMSTAR DEVELOPMENT CORPORATION. SHOWVIEW SYSTEM IS MANUFACTURED UNDER LICENCE FROM GEMSTAR DEVELOPMENT CORPORATION.
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* MANUFACTURED UNDER LICENSE FROM DOLBY LABORATORIES LICENSING CORPORATION.

★ SPECIFICATIONS (non-AKAI brand models)

Format	VHS standard
Video recording system	Rotary, slant azimuth two-head helical scan system
Rotary heads	
637NE/3717CE/ 4717NE/7357NE	2 video heads
837NE/3747CE/ 4747NE/7457NE	4 video heads
RF input	System B,G (PAL,SECAM) VHF: ch 2-4, 5-12 UHF: ch 21-69 Cable: ch S1'-S3', S1-S41
RF output	System G type modulation UHF ch 21-69 adjustable (or off) (preset ch 36)
Recording (line input)	PAL SECAM (recorded as MESECAM)
Playback (line output)	PAL SECAM (MESECAM tape) Simulated PAL (NTSC tape)
Video	
Line input level	0.5-2.0 Vp-p/75 ohms, unbalanced
Line output level	1.0 Vp-p/75 ohms, unbalanced
S/N ratio	More than 45 dB
Horizontal resolution	More than 250 lines (PAL)
Audio	
Line input level	–6 dBs/50 k ohms, unbalanced
Line output level	–6 dBs/1 k ohms, unbalanced
S/N ratio	More than 40 dB
Frequency response	70 - 8,000 Hz
Recording/Playback time	
637NE/3717CE/4717NE/7357NE	
CCIR	240 min. with E-240 cassette
NTSC (playback only)	160 min. with T-160 cassette
837NE/3747CE/4747NE/7457NE	
CCIR	240 min. with E-240 cassette in SP mode 480 min. with E-240 cassette in LP mode
NTSC (playback only)	160 min. with T-160 cassette in SP mode 480 min. with T-160 cassette in EP mode
Tape speed	
637NE/3717CE/4717NE/7357NE	
CCIR	23.39 mm/sec.
NTSC	33.35 mm/sec.
837NE/3747CE/4747NE/7457NE	
CCIR	23.39 mm/sec. in SP mode 11.695 mm/sec. in LP mode
NTSC	33.35 mm/sec. in SP mode 11.12 mm/sec. in EP mode
Quick finder	
CCIR	7 times normal speed
NTSC	5 times normal speed
FF, RWD time	Approx. 150 sec. with E-180 cassette
Timer	
Program	8 programs/1 year and OTR
Clock reference	Quartz crystal
Display	TV screen & FLD (tape counter, timer etc.)
Power requirement	220-240 V AC, 50 Hz
Power consumption	16 W
Operating temperature	5°C - 40°C
Dimensions	380 (W) x 93 (H) x 276 (D) mm
Weight	3.4 kg

Standard accessories

AC power cord	1
Antenna cable	1
Remote control unit	1
Batteries for remote control	2
Operator's manual	1

0 dBs = 0.775 VRMS

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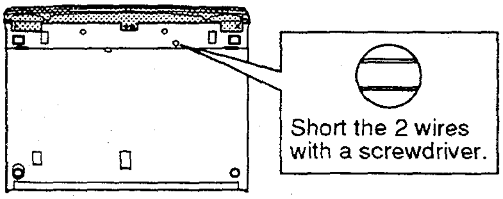
SHOWVIEW SYSTEM IS MANUFACTURED UNDER LICENCE FROM GEMSTAR DEVELOPMENT CORPORATION.

PRESETS IN THE TEST MODE

1) Engaging the "TEST MODE"

To set the VCR to the test mode, firstly short the reset wires located on the bottom as shown below, with a flat head screw driver (This will ground the reset pin of the system control MI-COM). Next, plug in the AC power cord while pressing and holding both the "STANDBY/ON" and "STOP/EJECT" buttons (on the FRONT PANEL) at the same time.

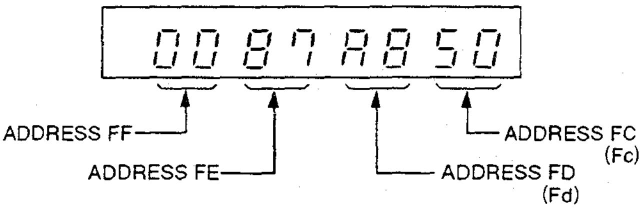


Short the reset wires again to disengage the "TEST MODE". (The test mode is not disengaged, even if the AC power cord is disconnected, without shorting the reset circuit.

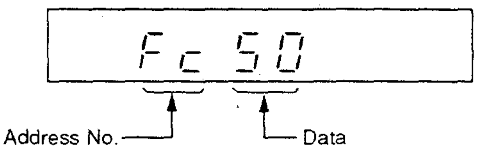
NOTE: Once the system control MI-COM is reset, clock and program data will be cancelled.

2) Model code preset

1. Engage the "test mode". (Never turn the power on.) The model code will be displayed in the FL display in 8 digit form.



2. While pressing both the "FF" and "RWD" buttons, reset the system control MI-COM and keep holding the "FF" and "RWD" buttons until the address number (typically, Fc or Fb) appears.
   The address number will be shown in 2 digits in the minutes display of the FL display and its data will be shown in 2 digits in the seconds display.



3. Select address "Fc" by pressing the "FF" or "FWD" button if the address "Fc" is not appeared.
4. Choose the data in the address Fc column, that corresponds to the model number you are working on, from the following list. Set the chosen data value by pressing the "STOP/EJECT" or "PLAY" button.

- **2 head-models**

MODEL	MODEL CODE	ADDRESS			
		Fc	Fd	FE	FF
VS-G260EA	00818970	70	89	81	00
VS-G260EDG	008780F0	F0	80	87	00
VS-G260EK	00808870	70	88	80	00
VS-G260EOH(Y1)	008488b0	b0	88	84	00
VS-G260EM	00878870	70	88	87	00
VS-G260ES	000788F0	F0	88	07	00
VS-G260SEG	03849Ab0	b0	9A	84	03
VS-G261EOH(Y1)	008488b0	b0	88	84	00
VS-G262EOH(Y2)	038488F0	F0	88	84	03
VS-G263EOH(E)	018488b0	b0	88	84	01
VS-G265EA	00818978	78	89	81	00
VS-G265EDG	0387A0F8	F8	A0	87	03
VS-G265EOH(Y1)	0384A8F8	F8	A8	84	03
VS-G265EM	00878878	78	88	87	00
VS-G265SEG	03849Ab8	b8	9A	84	03
VS-G267EOG	03Ac92b8	b8	92	Ac	03
VS-G267EOH(Y2)	0384A8b8	b8	A8	84	03
VS-G270EK	00809A78	78	9A	80	00
VS-G270EOH(E)	0184b8F8	F8	b8	84	01
VS-G270SEG	03AcbAb8	b8	bA	Ac	03
VS-G271EK	01A09AF8	F8	9A	A0	01
VS-G275EOH(Y1)	03A4bAb8	b8	bA	A4	03
VS-G276EOH(Y1)	03A4bAF8	F8	bA	A4	03
VS-G277EOG	03Acb2F8	F8	b2	Ac	03
VCR1637NE	01841Ab8	b8	1A	84	01
VCR3017NE	01841Ab8	b8	1A	84	01
VCR4017NE	01841Ab8	b8	1A	84	01
VCR6257NE	01841Ab8	b8	1A	84	01

- **4 head-models**

MODEL No.	MODEL CODE	ADDRESS			
		Fc	Fd	FE	FF
VS-G460EA	0081A950	50	A9	81	00
VS-G460EDG	008780d0	d0	80	87	00
VS-G460EM	0087A850	50	A8	87	00
VS-G460SEG	03849Ad0	d0	9A	84	03
VS-G465EA	0081A958	58	A9	81	00
VS-G465EDG	0387A0d8	d8	A0	87	03
VS-G465EOH(Y1)	038488d8	d8	88	84	03
VS-G465SEG	03849Ad8	d8	9A	84	03
VS-G467EOH(Y2)	0384A8d8	d8	A8	84	03
VS-G470EK	01A09A58	58	9A	A0	01
VS-G470SEG	03AcbAd8	d8	bA	Ac	03
VS-G475EOH(E)	03A4bAd8	d8	bA	A4	03
VS-G475EOH(Y1)	03A4bAd8	d8	bA	A4	03
VS-G477EOG	03Acb2d8	d8	b2	Ac	03
VCR1837NE	03A41Ad8	d8	1A	A4	03
VCR3047NE	03A41Ad8	d8	1A	A4	03
VCR4047NE	03A41Ad8	d8	1A	A4	03
VCR6457NE	03A41Ad8	d8	1A	A4	03

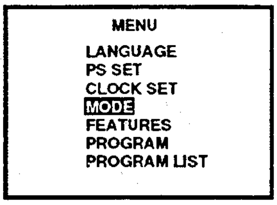
(On the FL display, B, C and D are indicated with small letters.)

★ INFORMATION

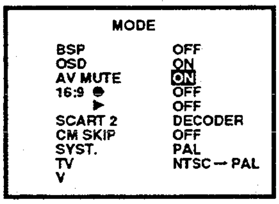
MULTI FUNCTION MENU MODE

This is an on-screen display of the various modes you can programme via the TV screen.

TV SCREEN

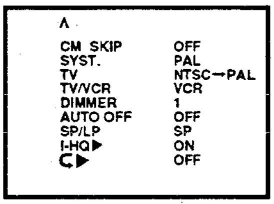


LANGUAGE	: To select a language for the on-screen displays.
PS SET	: To preset or cancel TV stations.
CLOCK SET	: To set the clock and AUTO ADJUST TV station.
MODE	: To set BSP (blank skip play ON/OFF), OSD (on screen display ON/OFF), AV MUTE (ON/OFF), 16:9 (REC ON/OFF, PB ON/OFF), SCART2 (DECODER/ AV2), CM SKIP (30/60/150/OFF), SYST. (colour system PAL/MESECAM/SECAM/ AUTO), TV (NTSC → PAL/NTSC 4.43), TV/VCR, DIMMER (FLD bright-ness 1,2,3), AUTO OFF (auto power off), SP/ LP, I-HQ (ON/OFF), ↩▶ (repeat ON/ OFF)



MODE

BSP OFF
OSD ON
AV MUTE ON
16:9 ● OFF
▶ OFF
SCART 2 DECODER
CM SKIP OFF
SYST. PAL
TV NTSC → PAL
V



Λ

CM SKIP OFF
SYST. PAL
TV NTSC→PAL
TV/VCR VCR
DIMMER 1
AUTO OFF OFF
SP/LP SP
I-HQ▶ ON
↩▶ OFF

FEATURES	: To perform ↩0 (return to counter zoro), BLANK (blank search), INTRO (intro scan) or T. TUNING (tape tuning) functions.
PROGRAM	: To set manual timer recording.
PROGRAM LIST	: To review the times, dates or cancel programs that you have entered for timer recording.

If necessary, refer to the respective sections in the operator's manual for detailed information.

※ Some modes are not available on certain models.

1. Press the "MENU" button on the remote control unit. The menu list screen will be displayed on the TV screen.
2. Select the desired menu with the "⋀" or "⋁" button.
3. Press the "OK" button. The selected menu screen will be displayed on the TV screen.
4. Select the desired mode (or function) with the "⋁" or "⋀" button. The number of the modes (or functions) depends on the sort of the menu.
5. Set the each mode (or function) by pressing the "⋁" or "⋀" button and ">" or "<" button.
6. Press the "OK" button. The selected menu screen will be disappeared few seconds after the "OK" button is pressed. This means the setting has been completed correctly.

MANUAL TRACKING/PICTURE/STABILITY ADJUSTMENT

Using the remote control, the VCR can be adjusted for tracking and picture sharpness anytime during the playback mode.

- Manual tracking control
  Press the "<" or ">" button repeatedly until the picture is clear. During manual tracking adjustment, the tracking position is shown on the TV screen, and disappears automatically after adjustment has been completed. Use this function when performing the A/C HEAD phase adjustment.
- Picture sharpness control
  Press the "⋀" button repeatedly to sharpen the picture or press the "⋁" button to soften the picture.
- Stability adjustment

1) To correct picture shake during the slow motion or still mode:
   Press the "⋀" or "⋁" button repeatedly until the picture shake is corrected.
2) To correct tracking during the still mode:
   Press the "<" or ">" button repeatedly until the picture is clear.

ERROR ANNOUNCEMENT

When a malfunction occurs, the following error indicators appear on the FL display to indicate the problem when the power is turned off.

Err 1 : AL power supply has short circuited.

Err 2 : The loading motor has stopped.
(When the mechanism position detect switch is not able to read the specified code, that is to say not able to reach the specified position within the specified time.)

Err 3 : The drum motor has stopped.
(When the drum motor does not rotate due to condensation, etc.)

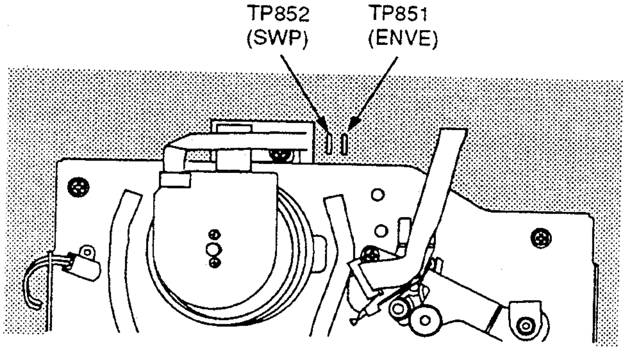
Err 4 : The capstan motor has stopped.

5. Memorize the data into the EEP ROM IC by pressing the "REC" button.
6. The address "Fd" and its data will be shown in the FL display approx 2 seconds later automatically. Repeat the presetting (steps 4 to 5) for addresses "Fd", "FE" and "FF" in the same manner as address "Fc".
7. Peset the system control MI-COM to disengage the model code preset mode.

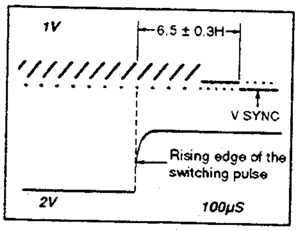
NOTE : This model code preset is absolutely necessary when the IC405 (EEP-ROM) on the MAIN PCB is replaced.

3) Video switching point preset

1. Engage the "test mode" and press the "POWER" button.
2. Connect CH-1 of an oscilloscope to VIDEO OUT and CH-2 to theTP852 (SWP) on the MAIN PCB for triggering.



3. Play back the reference tape TF-530RFS (Part No. : AT-751775). Check the channel display of the FL display so that "1F" (center position in the tracking range) is indicated at this point. If not indicated, press the "<" or ">" button on the remote control until "1F" is indicated.
4. Press the "REC" button during playback.
5. Confirm that the switching point is positioned 6.5 ± 0.3 H before the left edge of the V-sync as shown.



NOTE:

a) Make sure that the A/C head phase adjustment has been adjusted correctly before making video switching point preset. (Refer to step 4-3)

b) This switching point preset is absolutely necessary after the folllowing replacements.

- When the video head Assy is replaced.
- When the DRUM MOTOR PCB is replaced.
- When the SERVO/SYSCON MI-COM or EEP ROM IC (IC405) on the MAIN PCB is replaced.

4) Memorization of the reference RF envelope detect voltage (I-HQ)

For correct operation of the I-HQ tape tuning system, memorization of the reference RF envelope detect voltage is absolutely necessary. When the VIDEO HEAD Assy or EEP ROM IC in the MAIN PCB is replaced for any reason, memorize the reference RF envelope detect voltage according to the following procedure.

1. Engage the test mode.
2. Turn the VCR power ON.
3. Set the tape speed to "SP mode".
4. Insert the I-HQ test tape "TF-556AT" (AT-751822J) and then perform tape tuning (MENU → FEATURES → T.TUNING → OK).
5. Make a recording on the I-HQ test tape for more than 1 minute and then rewind it to the point where the recording was started.
6. Play back the tape. Reference RF envelope detect voltage data in the memory is displayed in 2 digits in the hours display part of the FL display and the present envelope detect voltage data is displayed in 2 digits in the minutes display part (the data is displayed in hexadecimal numbers).
7. After the auto tracking has been activated, press the "CANCEL" button on the remote control unit. So present RF envelope detect voltage data will be transferred to the hours part's 2 digits and memorized in the EEP ROM IC.
8. Next, set the tape speed to "LP mode" and repeat the steps 4 to 7 (2 speed models).
9. Terminate the test mode.

5) Other facilities in the test mode

1. Tracking position display

In the "SP play" mode, tracking position data can be displayed on the FL display. Data is displayed in 64 steps in hexadecimal numbers from "00" to "3F" in the seconds display part on the FL display. Pressing the "TV/VCR" button on the remote control unit during playback directly sets the tracking to the maximum "3F" position and pressing the "COUNTER RESET" button sets it to the minimum "00" position.

Pressing the "PLAY" button during playback sets tracking to the center position "1F" automatically. If "1F" does not appear even when the "PLAY" button is pressed, keep pressing the "<" or ">" cursor button on the remote control unit until "1F" is indicated and then press the "OK" button to memorize the position.

2. Suspension of the tape protection system

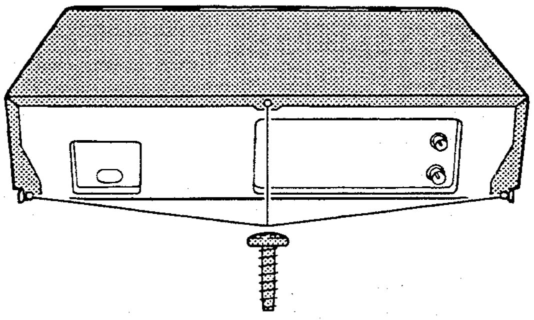
When the VCR is not in the "test mode", the "REC PAUSE" mode will be released after 30 minutes in order to protect the tape. The "STILL" mode will also be released after 5 minutes. During the "test mode", however this tape protection system will not operate.

※ Video head rotation will stop 5 min. after the "REC PAUSE" mode has been engaged even during the test mode.

I. DISASSEMBLY

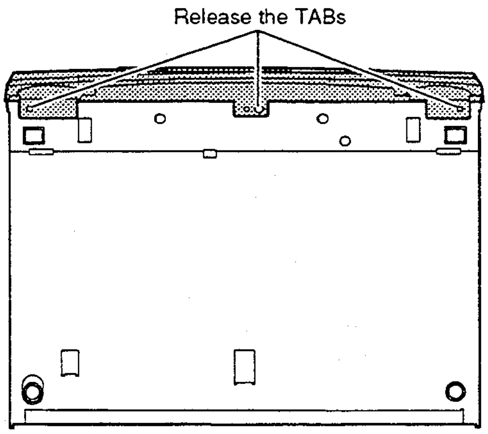
In case of trouble, etc., necessitating dismantling, please dismantle in the order shown in the illustrations.
Reassemble in the reverse order.
When reattaching the FRONT PANEL, hold the cassette loading slot door in the upright (open) position.

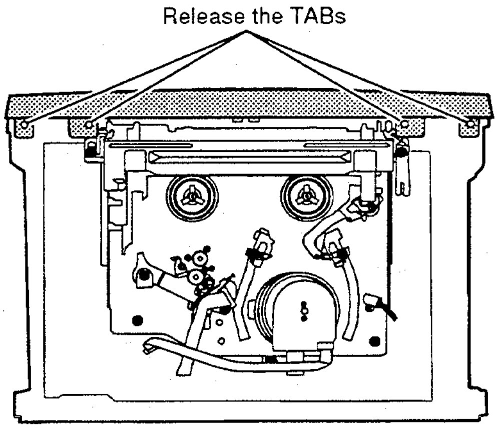
1. Removal of UPPER COVER



Lift the back part of the UPPER COVER up to remove.

2. Removal of FRONT PANEL





II. PRINCIPAL PARTS LOCATION

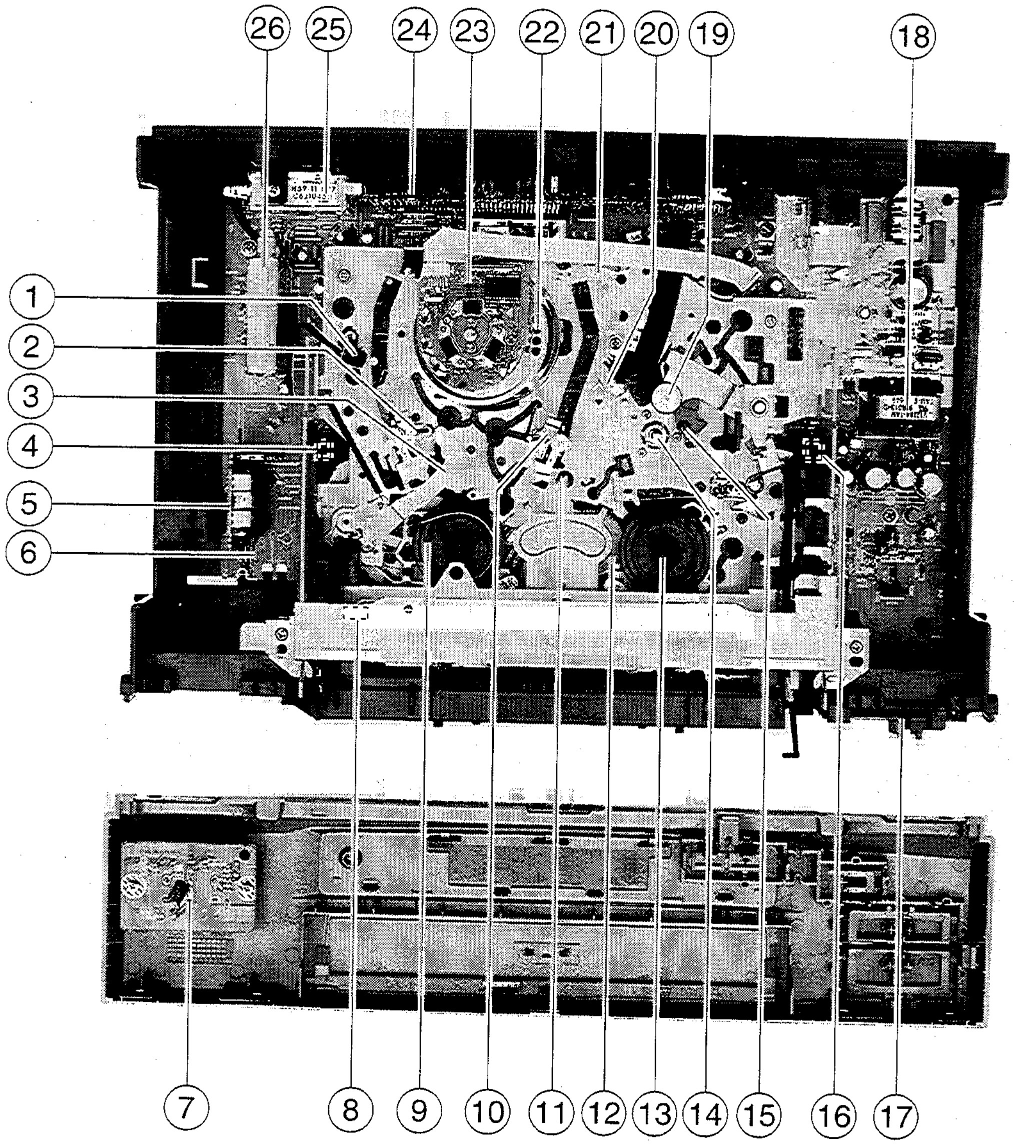


Fig. 2-1 Top view

1. FULL TRACK ERASE HEAD
2. GUIDE LEADER (L) BLOCK
3. TENSION ARM
4. TAPE END SENSOR
5. VIF-NORMAL PCB (except EDG/SEG models)
   VIF-EDG PCB (EDG models only)
   VIF-SEG PCB (SEG models only)
6. MAIN PCB
7. FRONT PCB
8. REC SAFETY SWITCH
9. REEL DISK (S)
10. GUIDE LEADER (R) BLOCK
11. SENSOR LED
12. IDLER ARM PART
13. REEL DISK (T)
14. CAPSTAN MOTOR
15. REVIEW ARM
16. TAPE START SENSOR
17. OPERATION PCB (except OEM models)
    OPERATION (OEM) PCB (OEM models only)
18. PULSE POWER TRANSFORMER
19. PINCH ROLLER ARM
20. A/C (AUDIO/CONTROL/SIDE TRACK ERASE) HEAD
21. HEAD CLEANER BLOCK
22. ROTARY VIDEO HEAD BLOCK
23. DRUM MOTOR PCB
24. I/O RCA PCB (EA/EM/ES models only)
    I/O SCART PCB (except EA/EM/ES models)
25. RF CONVERTER/BOOSTER UNIT
26. TUNER UNIT

※The photograph on this page is of model VS-G475EOH (Y1).

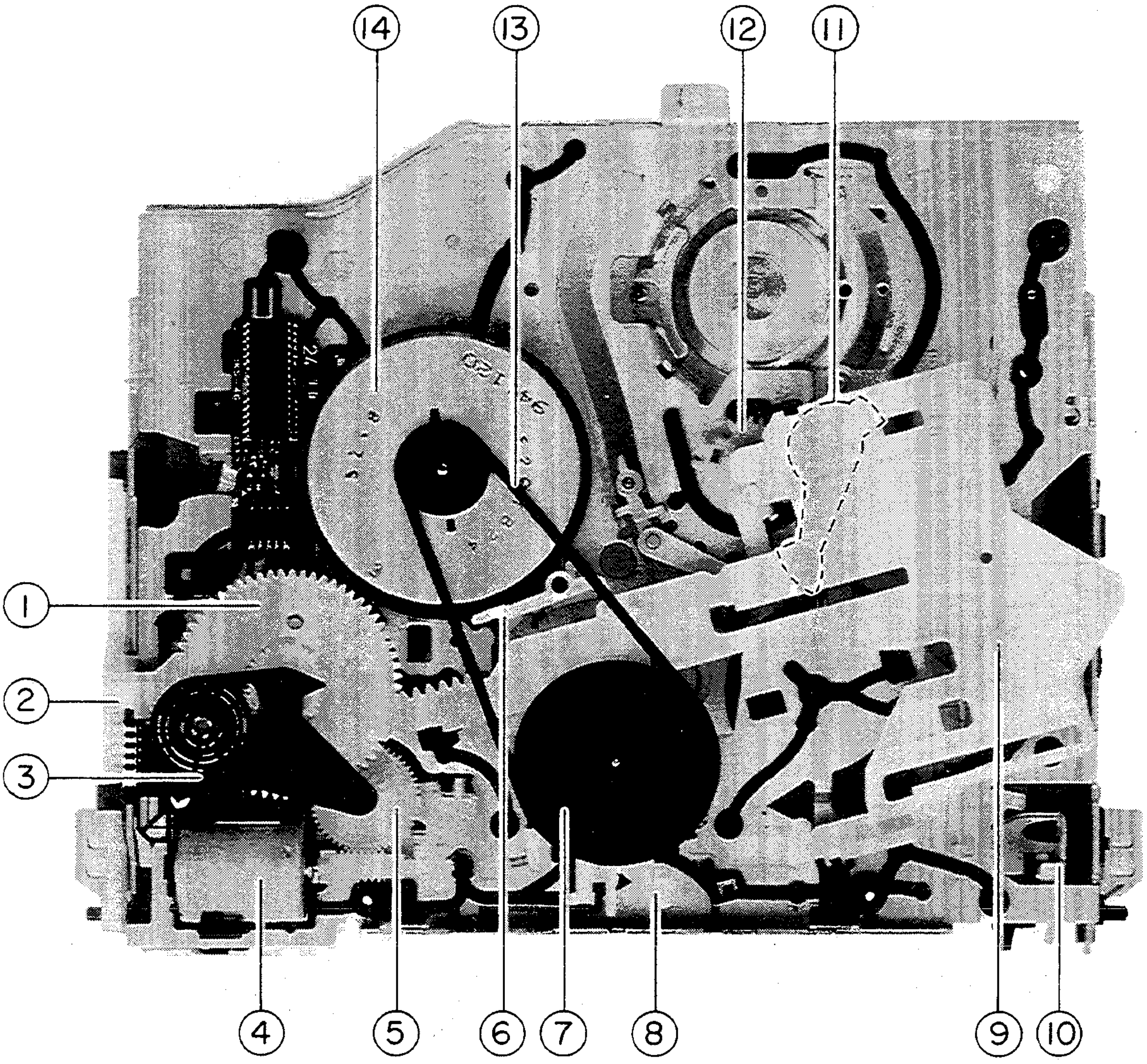


Fig. 2-2 Bottom view of the mechanism block

1. CENTER CAM GEAR
2. LOADING SLIDE
3. MODE DETECT SWITCH
4. LOADING MOTOR
5. WHEEL GEAR
6. SLOW ARM BRAKE
7. CLUTCH DISK PART
8. COUPLING ARM
9. MAIN SLIDER
10. LOADING ARM BLOCK
11. TOGGLE LEVER (L)
12. TOGGLE GEAR (R)
13. CAPSTAN BELT
14. CAPSTAN MOTOR BLOCK

III. DISASSEMBLY OF THE MAIN COMPONENTS

3-1. REMOVAL OF THE MECHANISM BLOCK

NOTE: Some parts in the mechanism block require complete removal of the mechanism block from the chassis when performing servicing.
Set the loading mechanism to the "EJECT" position by pressing the "EJECT" button, then disconnect the AC power plug from the AC socket before proceeding.
This sets the loading mechanism to the "reference position".

1) Disconnect the flat cable on the DRUM MOTOR PCB as shown in Fig. 3-1.

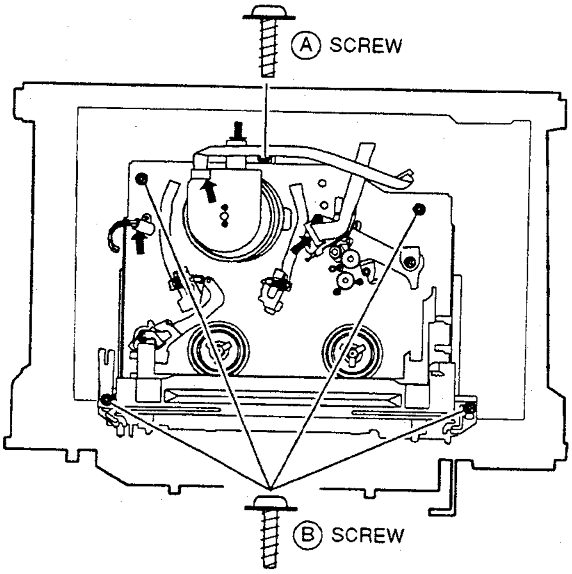


Fig. 3-1

2) Disconnect the connectors on the FULL TRACK ERASE HEAD and A/C HEAD.
3) Remove the Ⓐ screw and shield cover then disconnect the flat cable carefully.
4) Remove the four Ⓑ retaining screws and remove the MECHANISM BLOCK.

3-2. REMOVAL OF THE EJECTOR BLOCK

3-2-1. Removal of the CASSETTE HOLDER BLOCK

1) Remove the UPPER CHASSIS by pushing the Ⓐ part in the direction of the arrow while pressing the STOPPER, as shown in Fig. 3-2.

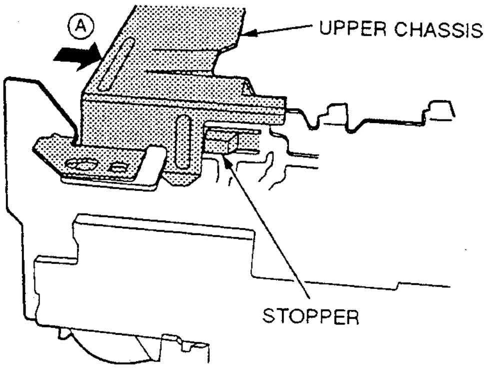


Fig. 3-2

2) Disengage the right end of the CASSETTE HOLDER BLOCK from its rail while pulling the STOPPER outwards.

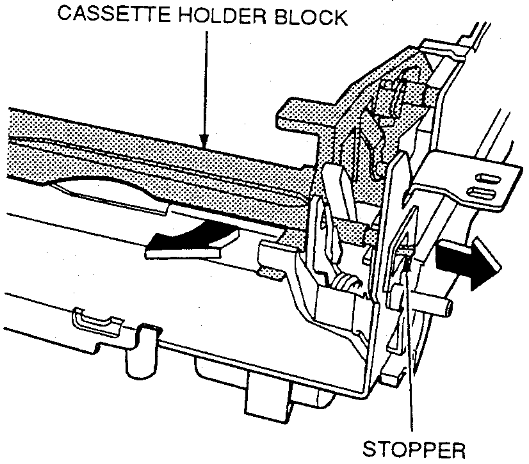


Fig. 3-3

3) Carefully pull the CASSETTE HOLDER BLOCK in the upper right direction and remove it from the mechanism block.

3-2-2. Removal of the LOADING ARM BLOCK

1) Connect a 6 V battery to the LOADING MOTOR or turning the LOADING MOTOR shaft manually, position the LOADING ARM to about 30° from vertical, as shown in Fig. 3-5.

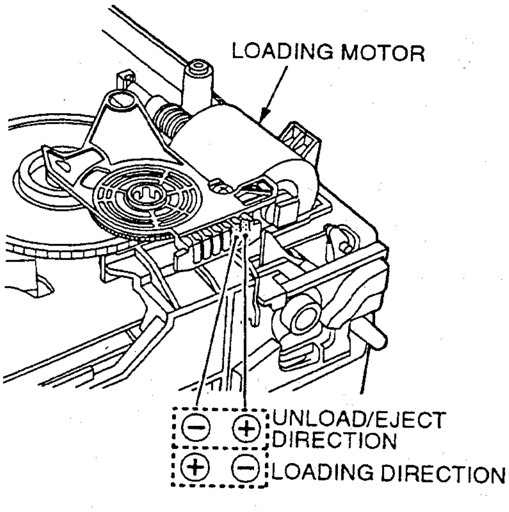


Fig. 3-4

NOTE: To avoid adding excessive stress to the mechanism, the voltage should not exceed 6V when connecting a battery to the LOADING MOTOR.

2) While pulling the left side STOPPER outwards, pull out the left end of the LOADING ARM from the bracket and remove the LOADING ARM BLOCK from the mechanism as shown in Fig. 3-5.

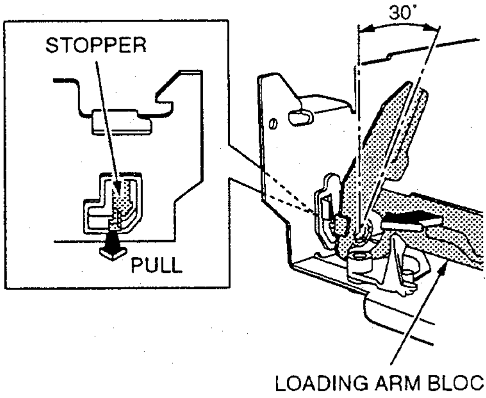

30°
STOPPER
PULL
LOADING ARM BLOCK

Fig. 3-5

3) Re-assemble in the reverse order for installation.
Re-position the LOADING ARM angle to the reference (EJECT) position before attaching the CASSETTE HOLDER BLOCK.

3-3. DISASSEMBLY OF THE LOADING DRIVE BLOCK

3-3-1. Removal of the LOADING MOTOR and MODE DETECT SWITCH

1) Remove the retaining screw then turn the LOADING MOTOR BLOCK in the direction of the arrow while releasing the Ⓐ and Ⓑ hooks, as shown in Fig. 3-6.

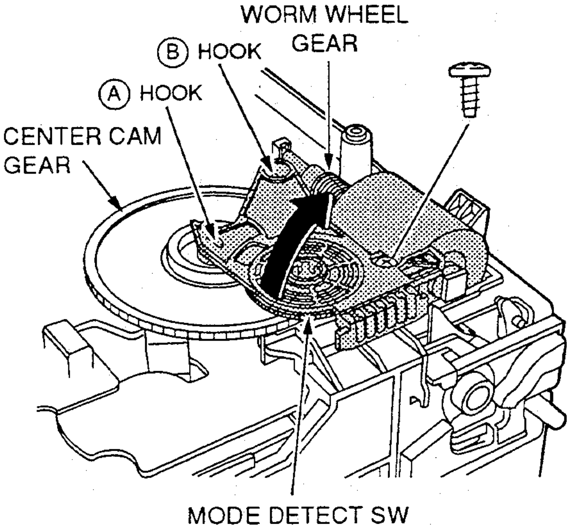

WORM WHEEL GEAR
Ⓑ HOOK
Ⓐ HOOK
CENTER CAM GEAR
MODE DETECT SW

Fig. 3-6

2) Press the lower side of the LOADING MOTOR in the direction of the arrow and then remove the LOADING MOTOR BLOCK (shown in Fig. 3-7) taking care not to damage the Ⓐ part.

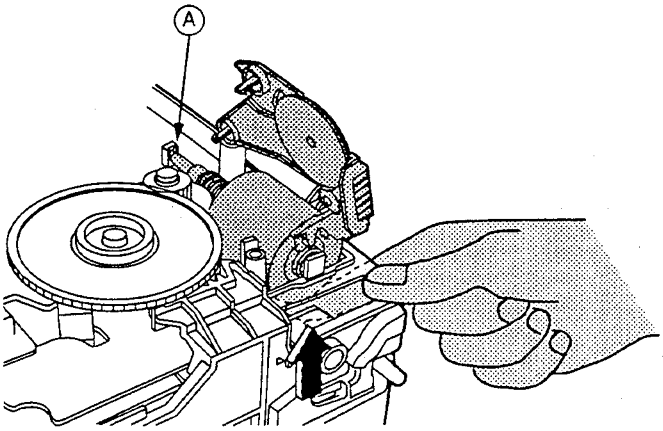


Fig. 3-7

3-3-2. Removal of the MAIN SLIDER

1) Remove the LOADING MOTOR BLOCK and CENTER CAM GEAR.
2) Remove the CAPSTAN BELT and CLUTCH DISK PART (carefully release the stopper on the shaft when removing).

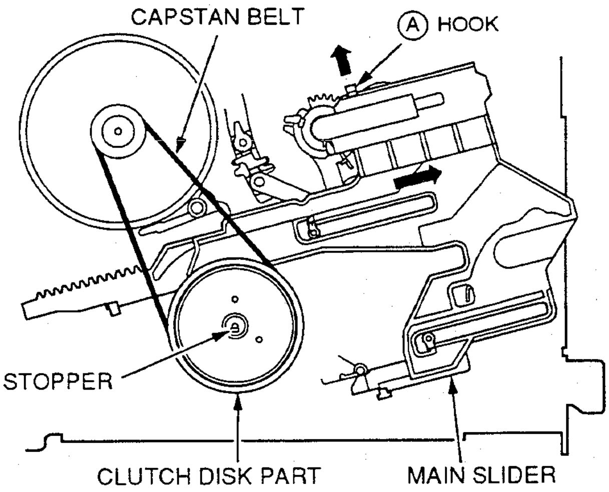

CAPSTAN BELT
Ⓐ HOOK
STOPPER
CLUTCH DISK PART
MAIN SLIDER

Fig. 3-8

3) Slide the MAIN SLIDER in the direction of the arrow and pull out the MAIN SLIDER while carefully releasing the Ⓐ hook, as shown in Fig. 3-8.

3-3-3. Removal of the TOGGLE GEAR (R) and TOGGLE LEVER (L)

1) First disengage the TOGGLE LEVER (L)'s lever from the GUIDE LEADER (L)'s pin then release the stopper on the TOGGLE LEVER (L), as shown in Fig. 3-9.

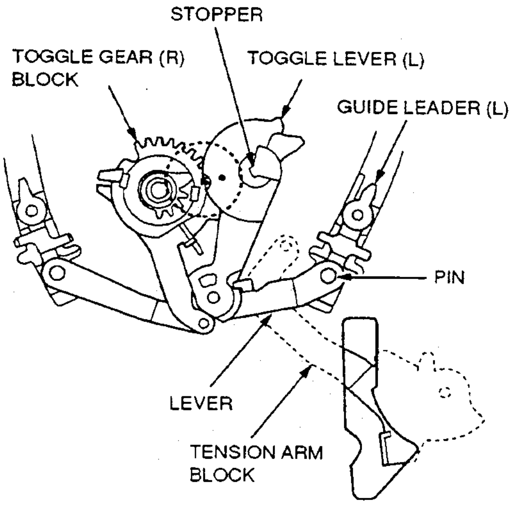

STOPPER
TOGGLE GEAR (R) BLOCK
TOGGLE LEVER (L)
GUIDE LEADER (L)
PIN
LEVER
TENSION ARM BLOCK

Fig. 3-9

2) Remove the TOGGLE LEVER (L) and TOGGLE GEAR (R).

3-4. REASSEMBLY OF THE LOADING DRIVE BLOCK

3-4-1. Position of the TOGGLE GEAR (R) and TOGGLE LEVER (L)

1) With your fingers, set both the GUIDE LEADERs (R) and (L) and TOGGLE GEAR (R) and TOGGLE LEVER (L) to the unloaded position. Align the mark on the TOGGLE LEVER (L) and ► mark on the TOGGLE GEAR (R), as shown in Fig. 3-9.

NOTE: Before positioning the TOGGLE LEVER (L), confirm that the TENSION ARM is positioned as shown by the dotted line in Fig. 3-9.

3-4-2. Installation of the MAIN SLIDER

1) Position the TENSION ARM LEVER and SUPPLY BRAKE's pin as shown by the dotted line respectively and then slide the MAIN SLIDER a little to the left along the three guides, as shown in Fig. 3-10.

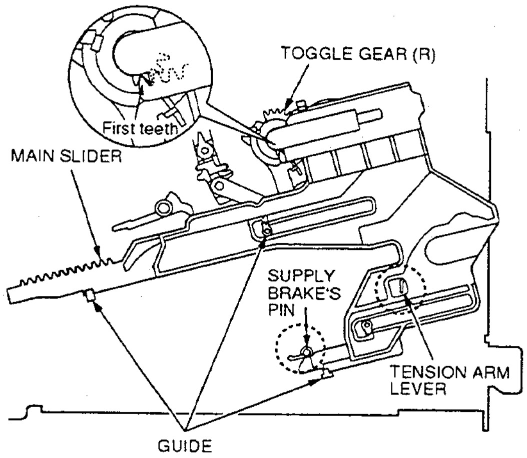

TOGGLE GEAR (R)
First teeth
MAIN SLIDER
SUPPLY BRAKE'S PIN
TENSION ARM LEVER
GUIDE

Fig. 3-10

2) Align the TOGGLE GEAR (R) timing so that the first teeth of the MAIN SLIDER align between the first and second tooth of the TOGGLE GEAR (R). Engage the HOOK and the MAIN SLIDER by pressing the MAIN SLIDER (near the HOOK) downwards.

3) Attach the CLUTCH DISK PART and CAPSTAN BELT.

3-4-3. Installation of the CENTER CAM GEAR

1) Fully slide the MAIN SLIDER to the right (unloaded position).

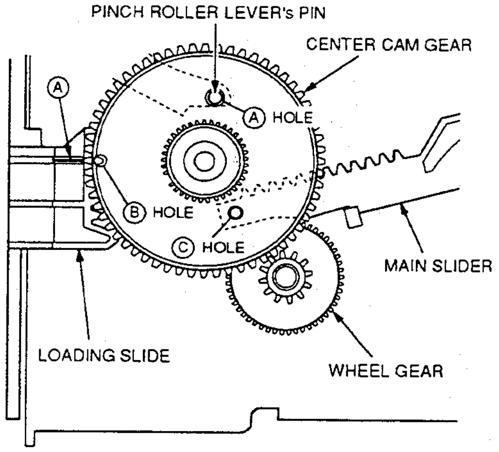

PINCH ROLLER LEVER's PIN
CENTER CAM GEAR
Ⓐ
Ⓐ HOLE
Ⓑ HOLE
Ⓒ HOLE
MAIN SLIDER
LOADING SLIDE
WHEEL GEAR

Fig. 3-11

2) Attach the WHEEL GEAR.

3) Attach the CENTER CAM GEAR so that the pin on the PINCH ROLLER LEVER is visible through the Ⓐ hole on the CENTER CAM GEAR as well as the LOADING SLIDE's Ⓐ part aligns with the Ⓑ hole on the CENTER CAM GEAR as shown in Fig. 3-11.

3-4-4. Installation of the LOADING MOTOR and MODE DETECT SWITCH

1) Carefully insert the LOADING MOTOR (with the MODE DETECT SWITCH attached) to the motor holder on the chassis and turn the LOADING MOTOR in the opposite direction of the arrow, shown in Fig. 3-6).

2) Align the hollow teeth of the CENTER CAM GEAR with the trapezoidally shaped teeth of the MODE DETECT SWITCH as shown in Fig. 3-12 then tighten the retaining screw.

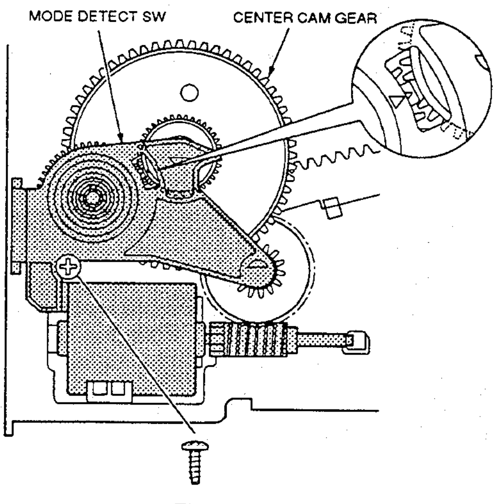

MODE DETECT SW
CENTER CAM GEAR

Fig. 3-12

3-5. REPLACEMENT OF THE CAPSTAN MOTOR BLOCK

1) Remove the three retaining screws on the top. Next, turn the mechanism block upside down then remove the CAPSTAN BELT.
2) Turn the CAPSTAN MOTOR BLOCK in the clockwise direction little and remove it from the chassis as shown in Fig. 3-13.

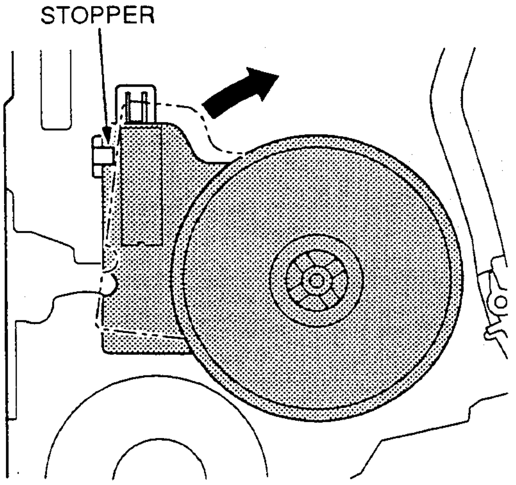


Fig. 3-13

3-6. DRUM MOTOR PCB REPLACEMENT

1) Remove the two retaining screws on the DRUM MOTOR PCB, as shown in Fig. 3-14.

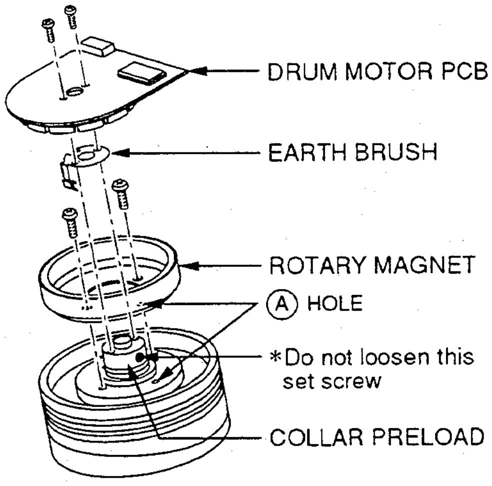


Fig. 3-14

2) If removal of the ROTARY MAGNET is necessary, first remove the EARTH BRUSH then remove the two ROTARY MAGNET retaining screws.
3) When reattaching the ROTARY MAGNET onto the UPPER DRUM of the VIDEO HEAD BLOCK, the Ⓐ hole must align with the Ⓐ hole on the UPPER DRUM.
4) Perform PB switching point adjustment (INFORMATION, PRESETS IN THE TEST MODE step 3)) after replacement of the ROTARY MAGNET or DRUM MOTOR PCB.

3-7. VIDEO HEAD BLOCK REPLACEMENT

3-7-1. VIDEO HEAD BLOCK replacement

※ Can not be replaced Upper Drum itself, replace whole Video Head Block.

1) Remove the DRUM MOTOR PCB, EARTH BRUSH and ROTARY MAGNET (refer to step 3-6).
2) Remove the three retaining screws on the bottom.

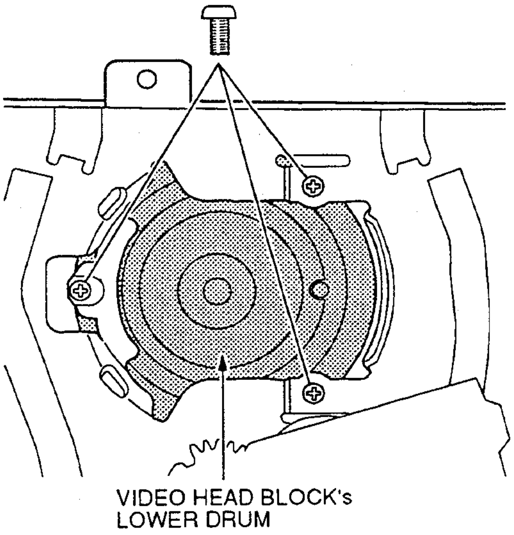


Fig. 3-15

NOTE:

1) Because the video head tips are fragile, take special care when handling the VIDEO HEAD BLOCK.
2) Height precision is required for proper performance. the following points should be noted when replacing the VIDEO HEAD BLOCK.
   a) Do not loosen the set screws on the COLLAR PRELOAD (refer to Fig. 3-14).
   b) Before replacement, use alcohol to clean both surfaces where the LOWER DRUM touches the chassis.
   c) Tighten the three retaining screws alternately and gradually.

3-7-2. After replacement

After replacement, the following adjustments are necessary for proper performance.

1) GUIDE LEADER height adjustment (MECHANICAL ADJUSTMENT 4-2-5).
2) CONTROL HEAD phase adjustment (MECHANICAL ADJUSTMENT 4-3).
3) PB switching point adjustment (INFORMATION, PRESETS IN THE TEST MODE step 3)).

IV. MECHANICAL ADJUSTMENT

4-1. BACK TENSION CONFIRMATION

1) Using a video cassette tape which you no longer need, remove both tape reels and the tape protection cover. Next, cover the video cassette's left and right detection holes with black adhesive tape.
2) Engage the playback mode using the tapeless cassette.
3) Confirm the distance between the three marks (line) on the TENSION ARM and the reference BOSS on the MECHA. CHASSIS so that the center of the reference BOSS aligns with the center line on the TENSION ARM, as shown in Fig. 4-1.
4) If the result is not satisfactory, eject the cassette tape and adjust the back tension with a flat head screwdriver, as shown in Fig. 4-1, until a satisfactory result is achieved.

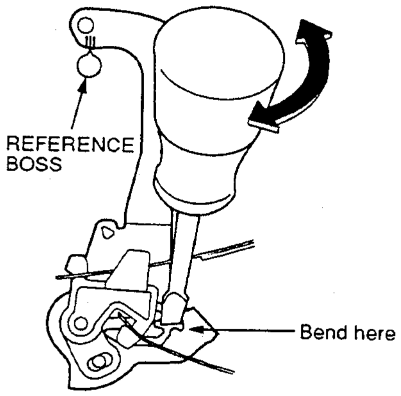


Fig. 4-1

4-2. TAPE TRANSPORT ADJUSTMENTS

NOTE: The following adjustments are required only when an irregularity is found, since these adjustments are precisely set at the factory.

4-2-1. Tape curl adjustment at the TAKE UP TAPE GUIDE

1) Play back a recorded tape which is no longer needed.
2) Turn the Ⓐ screw on the A/C HEAD BLOCK until the edge of the tape barely touches the lower part of the TAKE UP TAPE GUIDE, without any curl or wrinkle. (Turning the Ⓐ screw in the clockwise direction moves the tape downwards and counterclockwise direction moves the tape upwards.

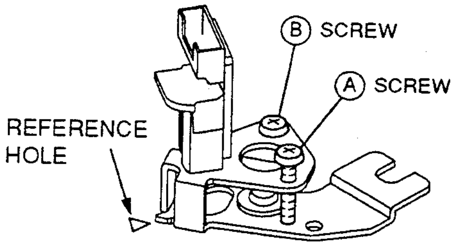


Fig. 4-2

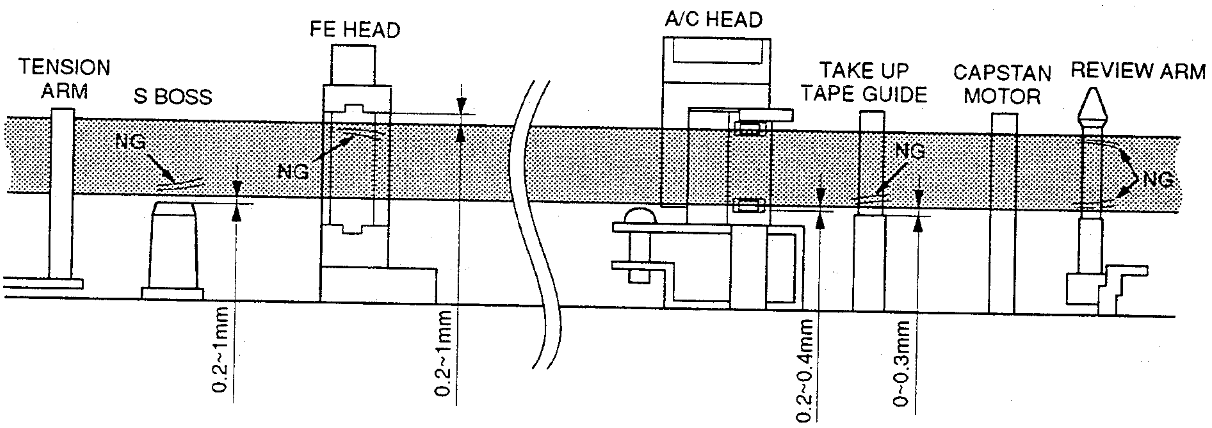


Fig. 4-3

3) Connect an oscilloscope to the AUDIO OUT terminal and play back the test tape TF-526HH (part No.: AT-751788).
4) Confirm that the output level is between 30 ~ 200 mVp-p (optimum value is 100 mVp-p). If the result is not satisfactory, finely adjust the Ⓐ and Ⓑ screws alternately until a satisfactory result is achieved.

IMPORTANT:

1) In order to prevent the A/C HEAD BASE from being distorted, and to keep the A/C HEAD straight up, always turn the head azimuth adjustment Ⓑ screw equally in the opposite direction to the Ⓐ screw.
2) Never turn the Ⓐ screw in the clockwise direction too much as it will cause the A/C HEAD BASE to bend.
3) Once the Ⓐ screw is adjusted, A/C HEAD azimuth adjustment is required for proper performance. (Refer to 4-2-4, A/C HEAD azimuth adjustment)
4) To make the adjustment easier, prepare a cassette tape with the protection cover removed.

4-2-2. Tape curl adjustment at the S-BOSS or FULL TRACK ERASE HEAD

1) Play back the protection cover-less cassette tape which you prepared.
2) Confirm that the edge of the tape is not touching the S-BOSS or upper flange of the FULL TRACK ERASE HEAD, as shown in Fig. 4-3. If the result is not satisfactory, bend the neck part of the TENSION ARM in the Ⓐ or Ⓑ direction slightly until a satisfactory result is achieved.

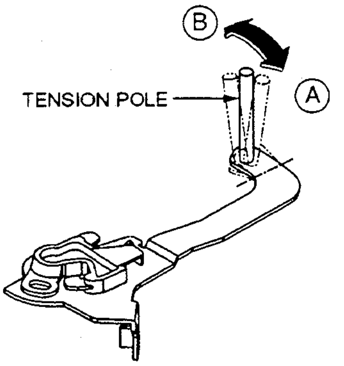


Fig. 4-4

3) Set the VCR to the "CUE" or "REVIEW" mode and confirm that the edge of the tape is not touching the S-BOSS or upper flange of the FULL TRACK ERASE HEAD. If the result is not satisfactory, readjust the TENSION ARM again.

4-2-3. CUE/REVIEW check

1) Play back the end of an E-240 tape and set the unit to the REVIEW mode by pressing the REW button.

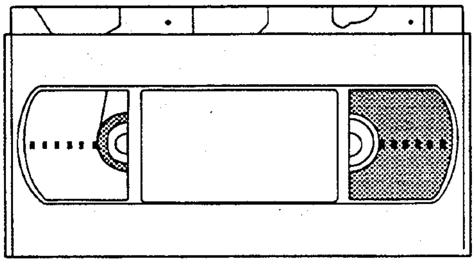


Fig. 4-5

2) After 3 seconds, confirm there is no curl or wrinkle among the TAKE UP TAPE GUIDE, CAPSTAN SHAFT and REVIEW ARM. If the result is not satisfactory, readjust the Ⓐ and Ⓑ screws until a satisfactory result is achieved.
3) Play back the beginning of an E-240 tape and this time set the unit to the CUE mode by pressing the F.FWD button.

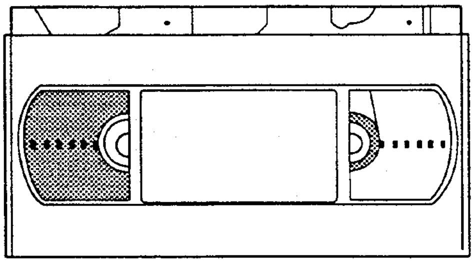
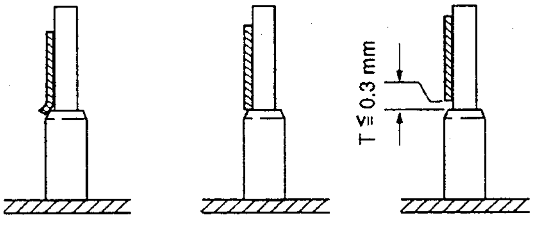


Fig. 4-6

4) Confirm there is no curl or wrinkle among the TAKE UP TAPE GUIDE, CAPSTAN SHAFT and REVIEW ARM. If curl or wrinkle occurs, slightly turn the Ⓐ screw until it disappears.
5) Set the unit to the REVIEW mode again. Then confirm that there is no curl or wrinkle near the TAKE UP TAPE GUIDE. (A small gap may appear after this adjustment, but this is allowable.)



(a) INCORRECT (b) CORRECT (c) CORRECT

Fig. 4-7

NOTE:

1) If the result is not satisfactory, repeat the adjustment until a satisfactory result is obtained.
2) Always play an undamaged tape to obtain satisfactory adjustment.
3) Because an E-240 tape can be damaged easily due to its thinness, pre-adjustment with an E-180 tape is recommendeed.

4-2-4. A/C HEAD azimuth adjustment

1) Connect an AC milli-voltmeter or an oscilloscope to the AUDIO OUT terminal on the rear panel.
2) Play back the reference tape TF-530RFS (Part No.: AT-751775).
3) Adjust the Ⓑ screw to obtain the maximum audio output (Refer to Fig. 4-2).

4-2-5. GUIDE LEADER height adjustment

1) Slightly loosen the set screw at the lower part of the GUIDE LEADER's (L) and (R) so that the GUIDE LEADER can be adjusted with reasonable tightness.

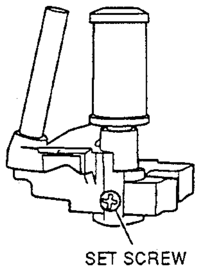


Fig. 4-8

2) Play back the reference tape TF-530RFS.
3) Connect an oscilloscope's CH-1 to the TP851 (V. ENVE) on the MAIN PCB and CH-2 to TP852 (SWP) for triggering. (Refer to "video switching point preset" on page 7 for location.)
4) Press the tracking button on the remote control to obtain the maximum RF envelope level.

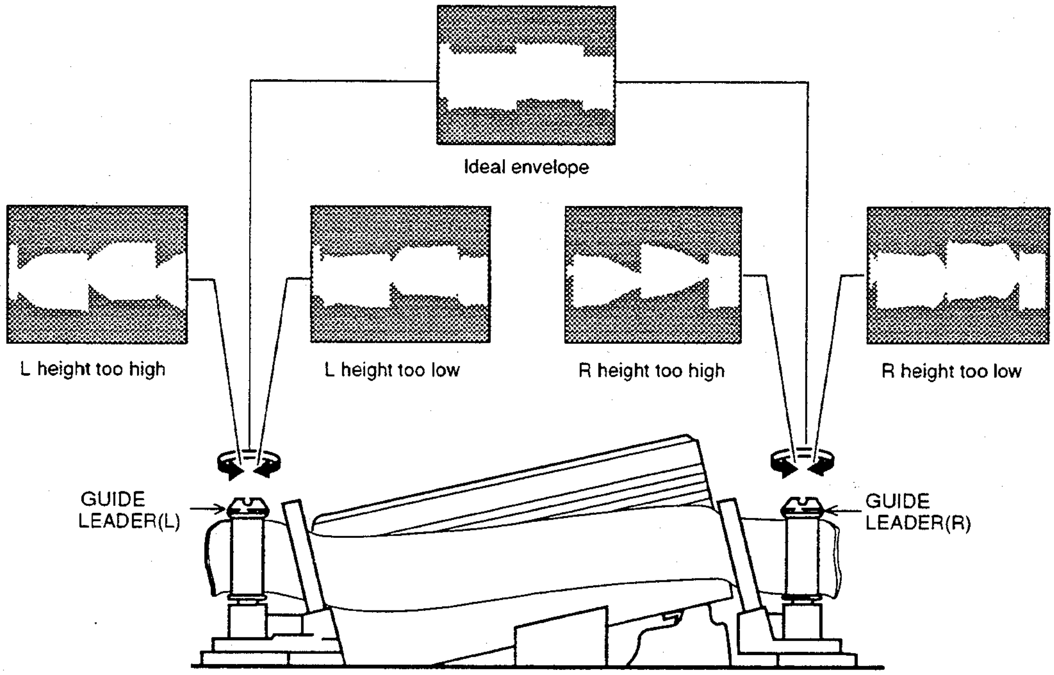


Fig. 4-9

5) Turn both the GUIDE LEADER's heads alternately with a flat head (—) screwdriver to obtain a flat RF envelope as the ideal envelope, as shown in Fig. 4-9.
6) After adjustment is completed, tighten the loading leader set screws.

4-3. A/C HEAD PHASE ADJUSTMENT

1) Connect an oscilloscope's CH-1 to the TP851 (V. ENVE) on the MAIN PCB and CH-2 to TP852 (SWP) for triggering. (Refer to "video switching point preset" on page 7 for location.)
2) Play back the reference tape TF-530RFS (Part No. : AT-751775).
3) Press the ">" or "<" TRACKING button on the remote control until the "X" mark can be seen in the center position of the tracking range on the TV screen as shown in Fig. 4-10.
4) Loosen the Ⓒ screw slightly so that the A/C HEAD BASE can be moved with reasonable tightness.
5) Insert a philips type screwdriver into the Ⓐ hole on the chassis through the A/C HEAD BASE's wane.
6) Move the A/C HEAD BASE by moving the screwdriver in the direction of the arrow, as shown in Fig. 4-11, to obtain the maximum RF output, then tighten the Ⓒ screw. Although there are a few points at which the RF output becomes maximum, the pointed head of the A/C HEAD BASE must be positioned as close to the reference hole as possible.
7) Eject the tape and then re-insert it and play it back again. Confirm that the RF output is maximum after the auto tracking control has been activated. Next, press the "<" or ">" button on the remote control alternately and confirm that the RF output is maximum at the center tracking position. If the result is not satisfactory, repeat steps 2) to 6). (This adjustment is very important as this affects the interchangeability of recorded tapes.)

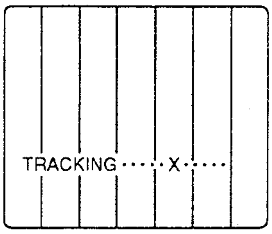


Fig. 4-10

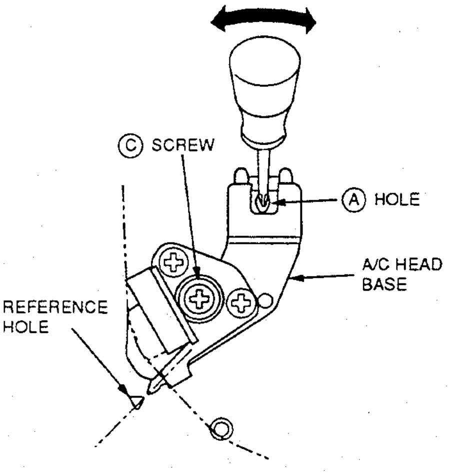


Fig. 4-11

V. PARTS LIST

ATTENTION

1. When placing an order for parts, be sure to list the Part No., Model No. and the description of each part. Otherwise, the non-delivery of the part or the delivery of a wrong part may result.
2. Please make sure that Part No. is correct when ordering. If not, a part different from the one you ordered may be delivered.
3. Since the parts shown in Parts List or Preliminary Service Manual may have been the subject of changes, please use this Parts List for all future reference.

HOW TO USE THIS PARTS LIST

1. This Parts List lists those parts which are considered necessary for repairs. Other common parts, such as resistors and capacitors, are listed in the "Common List for Service Parts" from which these parts should be selected and stocked.
2. The Recommended Spare Parts List shows those parts in the Parts List which are considered particularly important for service.
3. Parts not shown in the Parts List and "Common List for Service Parts" will not in principle be supplied.
4. How to read the Parts List.

a) Mechanism Block

2. HEAD BASE BLOCK

Ref. No.	Part. No.	Description
1	BH-T2023A320A	HEAD BASE BLOCK
2	HP-H2206A010A	HEAD R/P PR4-8FU C
3	ZS-477876	PAN20x03STL CMT
4	ZS-536488	BID20x08STL CMT
5	ZG-402895	SP CS ANGLE ADJUST

SP (Service Parts) Classification

This number corresponds with the individual parts index number in the figure.

b) PC Board

2. MAIN PC BOARD

Ref. No.	Part. No.	Description
IC1	EI-324536	IC HD14049BP
IC2	EI-336801	IC MB8841-564M
C1A	EC-338399	C MMY V 223M 250AC [U,E,B,S]
C1B	EC-350949	C MMY V 223M 250DC [J]
C1C	EC-338397	C MMY V 223M 125AC [C,A]
X1	EI-318384	OSC X'TAL NC-18C

Symbols for primary destination

[A] : AAL (U.S.A) [S] : SAA (Australia)
[B] : BEAB (England) [U] : U/T (Universal Area)
[C] : CSA (Canada)
[E] : CEE (Europe) [V] : VDE (Germany)
[J] : JPN (Japan) [Y] : Custom

SP (Service Parts) Classification

These reference symbols correspond with component symbols in the Schematic Diagrams.

The available PC Board Blocks are listed separately.

5. When Part No. is known, Parts Index at end of Parts List can be used to locate where that part is shown in Parts List by its Reference No. listed at right of Part No.

WARNING

⚠ INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.

AVERTISSEMENT

⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉDE L'APPAREIL, NE REMPLACER QUE DES PIÉCES RECOMMANDEES PAR LÉ FABRICANT.

1. RECOMMENDED SPARE PARTS

We suggest you to stock the following Recommended Spare Part items listed below since they can cover most of the routine service.

Ref. No.	Part No.	Description
1	BL-433561N4	ARM LOADING BLK
2	BL-433609N3	ARM PINCH BLK
3	BL-433538N3	ARM TENSION BLK
4	BM-433593N1	LOADING MOTOR PART
5	BM-433176N	MOTOR F2QTB24
6	BM-433198N	MOTOR F20EL60
7	⚠ BT-433228N	TRANS POW V1239A-TAM
8	BV-433522N1	GUIDE LEADER(L)BLK
9	BV-433534N1	GUIDE LEADER(R)BLK
10	BV-433615N2	HOLDER CASSETTE BLK
11	BV-434180N	RF CONVERT.YAA21-1108G G/K EDG [EDG]
12	BV-435474N	RF CONVERT.YAA21-1121G EA [EA]
13	BV-435423N1	RF CONVERTER MDLP3E008B G/I/K [EK AND NON-AKAI BRAND MODELS]
14	BV-387611N	RF CONVERTER YAA21-0808G EV [EM]
15	BV-429839N	RF CONVERTER YAA21-1045H G EO [EOH,EOG]
16	BV-429837N	RF CONVERTER YAA21-1046H I EK [ES]
17	BV-429901N	RF CONVERTER YAA41-0081G SECAM [SEG]
18	BV-V1234D430E	TL DRUMBLK(SERVICE)NX-2PAL-2 [2HEAD PAL EXCEPT G260/G261/G263/G267/G275EOH,G267EOG AND 2 HEAD MODELS FOR NON-AKAI BRAND]
19	BV-V1234D430F	TL DRUMBLK(SERVICE)NX-2SEG [2HEAD SEG MODELS]
20	BV-V1234D430G	TL DRUMBLK(SERVICE)NX-4PAL [4HEAD PAL MODELS]
21	BV-V1234D430H	TL DRUMBLK(SERVICE)NX-4SEG [4HEAD SEG MODELS]
22	BV-V1234D430A	TL DRUMBLK(SERVICE)NX-2PAL-1 [2HEAD PAL G260/G261/G263/G267/G275EOH,G267EOG AND 2 HEAD MODELS FOR NON-AKAI BRAND]
23	ED-390011N	D LED GL451 INFRARED
24	ED-390012N	D LED GL4800 INFRARED
25	⚠ ED-435727N	D SCHOTT.ERB83-006L6 S12 60/2A
26	⚠ ED-436213N	D SILI.ERA2210AVRB T051000/0.5
27	⚠ ED-435726N	D SILI.ERA92-02AVRB T05 200/1A
28	⚠ ED-435667N	D SILI.H ERB91-02L6 S12 200/1A
29	⚠ ED-435728N	D SILI.H ERD32-02J6 S12 200/3A
30	ED-416930N	D SILICON C.MA77-TX TXT08E
31	ED-432744N	D SILICON C.MC2840-1 T1T08E
32	ED-307573N	D SILICON H 1SS131T-77 T26
33	⚠ ED-401046N	D SILICON RL104F-E T26 400/1A
34	ED-403280N	D SILICON 1N4002N02 T05 100/1A
35	⚠ ED-418622N	D SILICON 1N4006N02 T05 800/1A
36	ED-432743N	D ZENER C.RD5.6MB2-T1 T1T08E
37	ED-422252N	D ZENER H HZS12A3L T26
38	⚠ ED-394991N	D ZENER H HZS18-3 T26 [EM]
39	ED-425442N	D ZENER H MTZJ13A T26 [EXCEPT EA,EM,G260/G270/G470EK]
40	⚠ ED-425278N	D ZENER H MTZJ20A T26 [EXCEPT EM]
41	ED-422519N	D ZENER H MTZJ4.3B T26
42	ED-418820N	D ZENER H MTZJ5.1C T26
43	ED-404242N	D ZENER H MTZJ5.6A T26
44	ED-433962N	D ZENER H MTZJ7.5C T26
45	ED-434126N	D ZENER H MTZJ8.2A T26 [SEG]
46	EE-435224N	TV TUNER TELB1-016A [G260/G270/G470EK]
47	EE-435227N	TV TUNER TELE1-012A [EA,EM]
48	EE-435225N	TV TUNER TELE4-045A [EXCEPT EA,EM,SEG,G260/G270/G470EK]
49	EE-435226N	TV TUNER TELE4-049A [SEG]
50	⚠ EF-393705N	FUSE 218 TIME 250V 1.00A
51	EI-435314N	IC BA7797F-E2 FPE2T24E
52	EI-435316N	IC BH7634AS
53	EI-435270N	IC LA70001M-TRM FPR T24E [2HEAD MODELS]
54	EI-435229N	IC LA70011M-TRM FPR T24E [4HEAD MODELS]
55	EI-432899N	IC LA7337 [SEG]
56	EI-428406N	IC LA7356M-TRM FPR T12E [EDG,EM,ES]
57	EI-432784N	IC LA7440M [EDG,EM,ES]
58	EI-432781N	IC LA7447BM [EXCEPT EDG,EM,ES]
59	EI-390053N	IC LA7910 [EXCEPT G260/G270/G470EK]
60	EI-403233N	IC LB1641
61	EI-435271N	IC LC74783JM-9648-TRM FPR T24E
62	EI-435252N	IC LC89977M-TE-R FPR T16E [EXCEPT EDG,EM,ES]
63	EI-435272N	IC LC89978M-TE-R FPR T16E [EDG,EM,ES]
64	EI-416647N	IC MM1111XS [G260EA/EM/ES,G265EA/EM]
65	EI-429889N	IC MM1112XFBE FPBT12E [SEG]
66	EI-437205N	IC M37777MAA1B1GP EXGSYN1 [NON-AKAI BRAND MODELS]
67	EI-435735N2	IC M37777MAA1B3GP EXGSYP3 [EXCEPT SEG AND NON-AKAI BRAND MODELS]
68	EI-435736N2	IC M37777MAA1B4GP EXGSYS3 [SEG]
69	EI-368809N	IC M51496P
70	EI-353750N	IC NJM4558MB T1 T1T32P
71	EI-435187N	IC S-806H-Z TO-92 T05
72	EI-428403N	IC SDA5649X FP T24E [EOG,SEG,G265/G465EDG,G270/G271/G470EK,G270/G275/G276EOH AND NON AKAI BRAND MODELS]
73	EI-422128N	IC TA76431S T05
74	EI-332259	IC TC4052BP
75	EI-425646N	IC UPC1823ACU
76	EI-337530N	IC UPC574J
77	EI-377101	IC UPC7805HF
78	EI-422145N	IC UPD16312GB-3B4
79	EI-422442N	IC 24LC02BT/SN FP T12E [G260EA/EDG/EOH/EM/ES/EK,G460EA/EDG/EM,G261/G262/G263EOH]
80	EI-431275N	IC 24LC04BT/SN FP T12E [EXCEPT G260EA/EDG/EOH/EM/ES/EK,G460EA/EDG/EM,G261/G262/G263EOH]
81	EI-368829N	OSC CE CSB512P
82	EI-416872N	OSC X'TALAPS1004A 17.734475MH
83	EI-425240N	OSC X'TALAPS1011A 16.000MHZ
84	EI-435809N	OSC X'TALAPS1030A 3.579545MHZ [EDG,EM,ES]
85	EI-435808N	OSC X'TALAPS1031A 4.433619MHZ [EXCEPT EDG,EM,ES]
86	EI-431323N	OSC X'TAL C-002RX 32.768KHZ
87	EM-435268N	IND FL FV681GA CHARACTER [EXCEPT SEG]
88	EM-435269N	IND FL FV683GA CHARACTER [SEG]
89	EO-432745N	OSC CE CSB500F32 500KHZ
90	⚠ ER-401039J	R FUSE V T05 ERD2FCV 1/4W 4R7J
91	⚠ ER-408829N	R FUSE V T05 RF25SCVTP1/4WR11K
92	⚠ ER-397385N	R FUSE V T05 RF25SCVTP1/4WR20K [EM]
93	⚠ ER-418648N	R FUSE V T05 RF25SCVTP1/4WR24K
94	⚠ ER-400729N	R FUSE V T05 RF25SCVTP1/4WR47K
95	⚠ ER-428204N	R FUSE V T05RF25SVTP 1/4W 220J
96	ES-433183N	SW MICRO MPU10390MLB0
97	ES-433595N	SW MODE SELECTOR MMS00340ZMBO
98	ES-414593N	SW TACT SOR-142HS T05

Ref. No.	Part No.	Description
99	ET-428361N	DETECTOR GP1U281X
100	ET-435413N	DETECTOR GP1U291Q [AKAI BRAND MODELS]
101	⚠ ET-422113N	PHOTO COUPLER PS2561-1-V
102	ET-429898N	TR C.DTA114EKA T146T08E
103	ET-433976N	TR C.DTA114TKA T146T08E
104	ET-429896N	TR C.DTA144EKA T146T08E
105	ET-429899N	TR C.DTA144TKA T146T08E
106	ET-430868N	TR C.DTC114EKA T146T08E
107	ET-433072N	TR C.DTC114TKA T146T08E
108	ET-432937N	TR C.DTC143TKA T146T08E
109	ET-429897N	TR C.DTC144EKA T146T08E
110	ET-433071N	TR C.DTC144TKA T146T08E
111	ET-428248N	TR C.2SA1037AK R,S T146T08E
112	ET-416932N	TR C.2SB709A R,S TXT08E
113	ET-428249N	TR C.2SC2412K R,S T146T08E
114	ET-432740N	TR C.2SC2480 T,S TXT08E
115	ET-428373N	TR C.2SD2318 E,U,V FPTLT16E
116	ET-416933N	TR C.2SD601A R,S TXT08E
117	ET-386058N	TR D-C.IMX1 T110T08E
118	ET-366753N	TR DTA114ES T05
119	ET-364082N	TR DTA114TS T05
120	ET-415140N	TR DTA115TS T05
121	ET-386784N	TR DTA143TS T05
122	ET-368834N	TR DTA144TS T05 [SEG]
123	ET-364023N	TR DTC114ES T05
124	ET-364492N	TR DTC114TS T05
125	ET-364645N	TR DTC143ES T05
126	ET-368786N	TR DTC143ZS T05
127	ET-361961N	TR DTC144ES T05
128	ET-373201N	TR DTC144TS T05 [SEG]
129	⚠ ET-427538N	TR FET 2SK2056 LBS2AKAI [EM]
130	ET-390010N	TR PHOTO PT4800
131	ET-390009N	TR PHOTO PT493F
132	ET-392746N1	TR 2SA933AS R,S T05
133	ET-433918N	TR 2SB1240 Q,R T05
134	ET-422154N	TR 2SB1426 Q,R T05 [SEG]
135	ET-392663N	TR 2SC1740S R,S T05
136	ET-419014N	TR 2SC1741S Q,R T05
137	ET-414816N	TR 2SC2668 Y T05
138	⚠ ET-428407N	TR 2SC3616 M,L T05 [EM]
139	⚠ ET-428371N	TR 2SC4908 [EXCEPT EM]
140	⚠ ET-401091J	TR 2SD2144S U,V,W T05 [EXCEPT EM]
141	ET-416697N	TR 2SD2396 J,K
142	HE-433151N	HEAD E VTR-1X2ERS11-108
143	HR-435698N1	HEAD ASSY HVUXA1003A
144	MB-433627N	BELT CAPSTAN (SG)
145	MI-433579N4	ARM IDLER PART
146	MI-433597N8	DISK CLUTCH PART
147	ML-433604N4	ARM REVIEW PART
148	ML-433586N	ARM SLOW BRAKE PART
149	ML-433576N	LEVER TOGGLE(L)
150	ML-433553N1	MAIN BRAKE(L)BLK
151	ML-433546N1	MAIN BRAKE(R)BLK
152	ML-433590N	SLIDE MAIN
153	MT-433537N1	DISK REEL
154	MZ-433591N	GEAR CAM CENTER
155	MZ-433578N	GEAR F/R
156	MZ-433568N	GEAR TOGGLE(R)BLK
157	MZ-433589N	GEAR WHEEL

2. MECHANISM (1) BLOCK

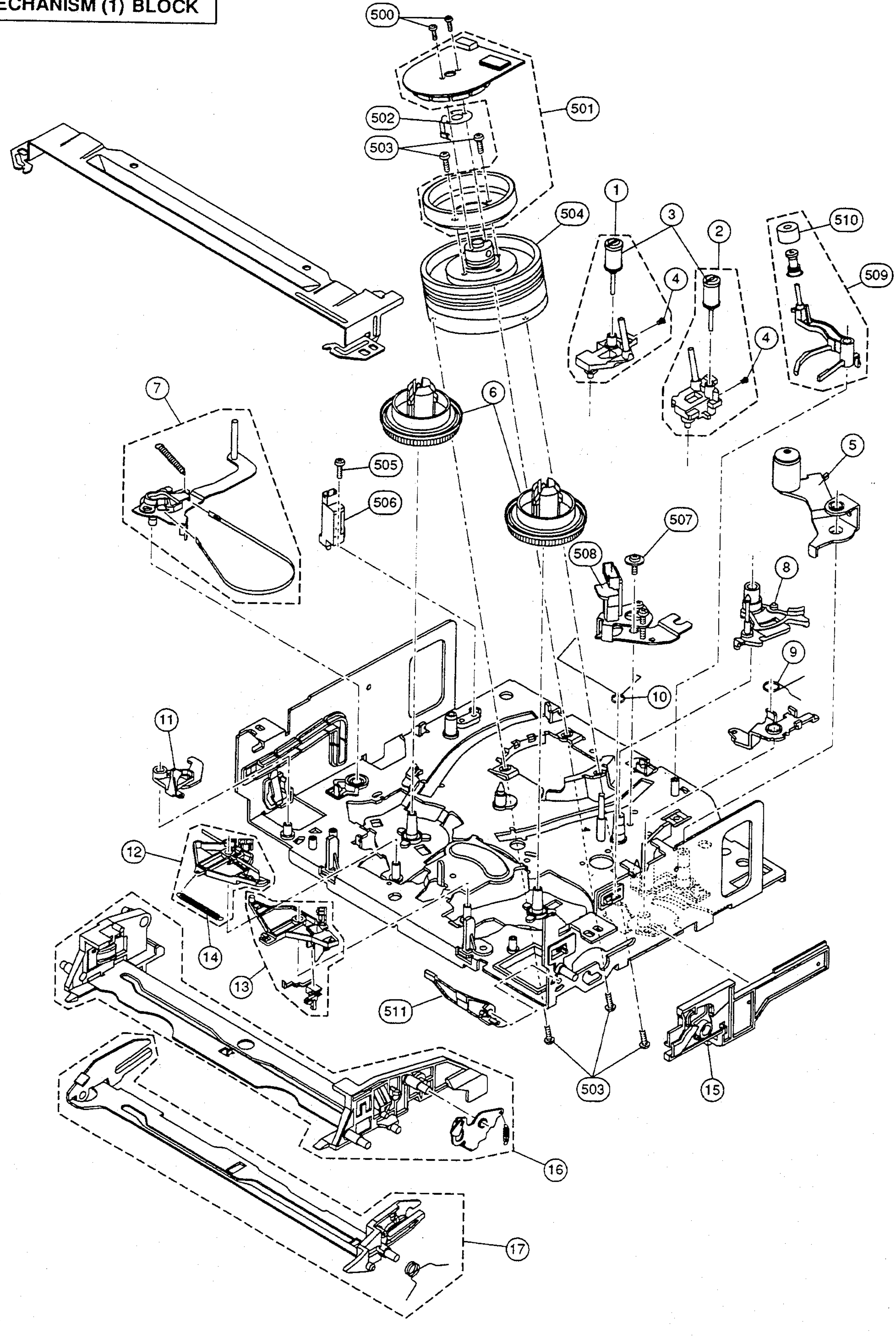
Ref. No.	Part No.	Description
1	BV-433522N1	GUIDE LEADER(L)BLK
2	BV-433534N1	GUIDE LEADER(R)BLK
3	VT-433526N	GUIDE ROLLER PART
4	ZS-418616J	PAN20X2.8STL CMT PS1 LEADER
5	BL-433609N3	ARM PINCH BLK
6	MT-433537N1	DISK REEL
7	BL-433538N3	ARM TENSION BLK
8	ML-433604N4	ARM REVIEW PART
9	ZG-433559N	SP TORSION PINCH
10	ZG-433608N3	SP TORSION REVIEW
11	ML-433560N	LEVER DETECTOR
12	ML-433553N1	MAIN BRAKE(L)BLK
13	ML-433546N1	MAIN BRAKE(R)BLK
14	ZG-433557N	SP PULL M.B
15	ML-433567N1	SLIDE LOADING
16	BV-433615N2	HOLDER CASSETTE BLK
17	BL-433561N4	ARM LOADING BLK
18	BB-433174N	MECHA BASE BLK NX
500	ZS-417161N	PAN23X04STL CMT (SG)
501	BM-433198N	MOTOR F20EL60
502	MZ-433904N	EARTH BRUSH PART
503	ZS-479474N	PAN26X05STL CMT (SG)
504-A	BV-V1234D430A	TL DRUMBLK(SERVICE)NX-2PAL-1 [2HEAD PAL G260/G261/G263/G267/ G275EOH,G267EOG AND 2 HEAD MODELS FOR NON-AKAI BRAND]
504-B	BV-V1234D430E	TL DRUMBLK(SERVICE)%NX-2PAL-2 [2HEAD PAL EXCEPT G260/G261/G263/ G267/G275EOH,G267EOG AND 2 HEAD MODELS FOR NON-AKAI BRAND]
504-C	BV-V1234D430G	TL DRUMBLK(SERVICE)%NX-4PAL [4HEAD PAL MODELS]
504-D	BV-V1234D430F	TL DRUMBLK(SERVICE)%NX-2SEG [2HEAD SEG MODELS]
504-B	BV-V1234D430H	TL DRUMBLK(SERVICE)%NX-4SEG [4HEAD SEG MODELS]
505	ZS-403887N	PT BID26X12STL CMT (SG)
506	HE-433151N	HEAD E VTR-1X2ERS11-108
507	ZS-344754N	ST PAN30X06STL CMT C080 (SG)
508	HR-435698N1	HEAD ASSY HVUXA1003A
509	BL-433689N	HEAD CLEANER BLK (SG) [EXCEPT EK,G260/G460EA,G262EOH]
510	HZ-417681N	ROLLER HEAD CLEANER(2) (SG) [EXCEPT EK,G260/G460EA,G262EOH]
511	ML-433628N	ARM MASK OPENER (SG)

The parts reference numbered 500 to 511 are not supplied with the "MECHA BASE BLK NX".

NOTE :

Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations with reference No.

MECHANISM (1) BLOCK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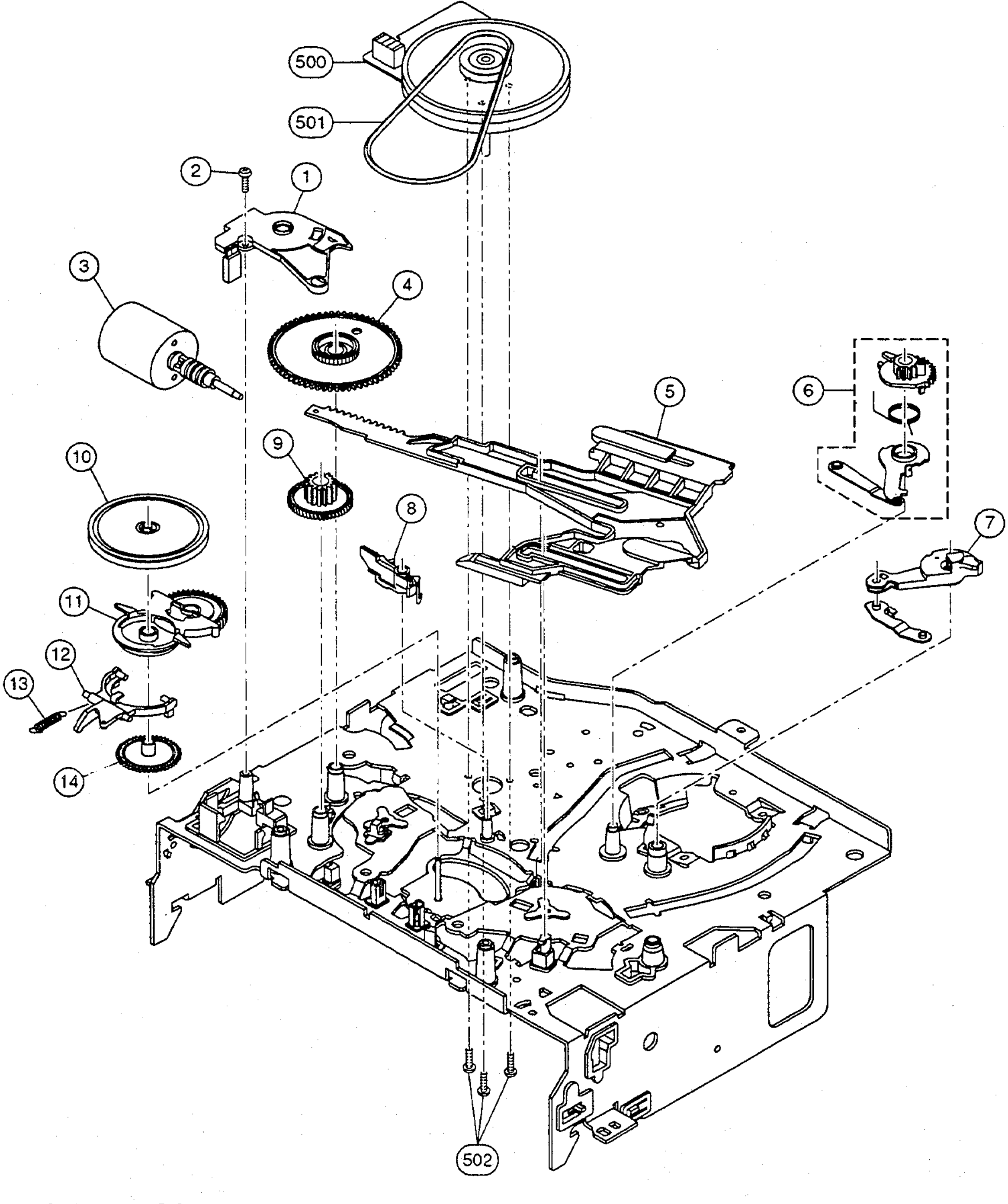
MECHANISM (2) BLOCK



3. MECHANISM (2) BLOCK

Ref. No.	Part No.	Description
1	ES-433595N	SW MODE SELECTOR MMS00340ZMBO
2	ZS-389950N	PT BID26X10STL CMT (SG)
3	BM-433593N1	LOADING MOTOR PART
4	MZ-433591N	GEAR CAM CENTER
5	ML-433590N	SLIDE MAIN
6	MZ-433568N	GEAR TOGGLE(R)BLK
7	ML-433576N	LEVER TOGGLE(L)
8	ML-433586N	ARM SLOW BRAKE PART
9	MZ-433589N	GEAR WHEEL
10	MI-433597N8	DISK CLUTCH PART
11	MI-433579N4	ARM IDLER PART
12	ML-433584N	ARM COUPLING
13	ZG-428605N	SP PULL COUPLING
14	MZ-433578N	GEAR F/R

Ref. No.	Part No.	Description
500	BM-433176N	MOTOR F2QTB24
501	MB-433627N	BELT CAPSTAN (SG)
502	ZS-201275N	ST PAN26X06STL CMT (SG)

The parts reference numbered 500 to 502 are not supplied with the "MECHA BASE BLK NX".

NOTE :

Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations with reference No.

4. P.C. BOARD BLOCK

Ref. No.	**Part No.**	**Description**
1-A	BA-V1246V600A	NS PC(#) MAIN BLK G260EA
1-B	BA-V1246V600F	NS PC(#) MAIN BLK G260EDG
1-C	BA-V1246V600C	NS PC(#) MAIN BLK G260EM
1-D	BA-V1247V600B	NS PC(#) MAIN BLK G260EOH(Y1) [G260/G261EOH[Y1]]
1-E	BA-V1246V600H	NS PC(#) MAIN BLK G260EK
1-F	BA-V1246V600L	NS PC(#) MAIN BLK G260ES
1-G	BA-V1247V605A	NS PC(#) MAIN BLK G262EOH(Y2)
1-H	BA-V1247V600A	NS PC(#) MAIN BLK G263EOH(E)
1-H	BA-V1246V600B	NS PC(#) MAIN BLK G265EA
1-I	BA-V1246V600G	NS PC(#) MAIN BLK G265EDG
1-J	BA-V1246V600D	NS PC(#) MAIN BLK G265EM
1-K	BA-V1247V600C	NS PC(#) MAIN BLK G265EOH(Y1)
1-L	BA-V1247V605B	NS PC(#) MAIN BLK G267EOH(Y2)
1-M	BA-V1247V600E	NS PC(#) MAIN BLK G267EOG
1-N	BA-V1247V600K	NS PC(#) MAIN BLK G270EOH(E)
1-O	BA-V1246V600J	NS PC(#) MAIN BLK G270EK
1-P	BA-V1246V600K	NS PC(#) MAIN BLK G271EK
1-Q	BA-V1247V600D	NS PC(#) MAIN BLK G275EOH(Y1)
1-R	BA-V1247V600L	NS PC(#) MAIN BLK G276EOH(Y1)
1-S	BA-V1247V600F	NS PC(#) MAIN BLK G277EOG
1-T	BA-V1247V600G	NS PC(#) MAIN BLK G260SEG
1-U	BA-V1247V600H	NS PC(#) MAIN BLK G265SEG
1-V	BA-V1247V600J	NS PC(#) MAIN BLK G270SEG
1-W	BA-V1249V600A	NS PC(#) MAIN BLK G460EA
1-X	BA-V1249V600D	NS PC(#) MAIN BLK G460EDG
1-Y	BA-V1249V600C	NS PC(#) MAIN BLK G460EM
1-Z	BA-V1249V600B	NS PC(#) MAIN BLK G465EA
1-a	BA-V1249V600E	NS PC(#) MAIN BLK G465EDG
1-b	BA-V1249V600G	NS PC(#) MAIN BLK G465EOH(Y1)
1-c	BA-V1249V600M	NS PC(#) MAIN BLK G467EOH(Y2)
1-d	BA-V1249V600F	NS PC(#) MAIN BLK G470EK
1-e	BA-V1249V600H	NS PC(#) MAIN BLK G475EOH
1-f	BA-V1249V600J	NS PC(#) MAIN BLK G477EOG
1-g	BA-V1250V600A	NS PC(#) MAIN BLK G460SEG
1-h	BA-V1250V600B	NS PC(#) MAIN BLK G465SEG
1-i	BA-V1250V600C	NS PC(#) MAIN BLK G470SEG
1-j	BA-V1258V600A	NS PC(#) MAIN BLK VCR3717CE [2HEAD MODELS FOR NON-AKAI BRAND]
1-k	BA-V1258V600B	NS PC(#) MAIN BLK VCR3747CE [4HEAD MODELS FOR NON-AKAI BRAND]
2-A	BA-F5002V040F	NS EX VIF-NOR BLK NOR-EOG [EA.EOH,EOG AND NON-AKAI BRAND MODELS]
2-B	BA-F5002V030A	NS EX VIF-EDG BLK NOR-EDG [EDG]
2-B	BA-F5002V040C	NS EX VIF-NOR BLK NOR-EM [EM]
2-C	BA-F5002V040B	NS EX VIF-NOR BLK NOR-EK [EK.ES]
2-D	BA-F5002V020A	NS EX VIF-SEG BLK NOR-SEG [SEG]

PC (#) MAIN BLK CONSISTS OF FOLLOWING P.C. BOARDS.

- MAIN P. C. BOARD
- FRONT P. C. BOARD (G460/G465EA,G265/G465EDG, G460EM,[illegible]7/G477EOG,G270/G470SEG,G265/G267/ G270/G275/G276/G467/G475EOH)
- RC SENSOR P. C. BOARD (EXCEPT AKAI BRAND MODELS)
- VIF P. C. BOARD

5. MAIN P.C. BOARD

Ref. No.	**Part No.**	**Description**
C201	⚠ EC-422101N1	C MMY V CUT MKTR40 104M 275AC
C202	⚠ EC-422101N1	C MMY V CUT MKTR40 104M 275AC
C204	⚠ EC-435729N	C CE V CUT ECKMRSY E222M 400AC
C205	⚠ EC-435729N	C CE V CUT ECKMRSY E222M 400AC
C206	⚠ EC-435729N	C CE V CUT ECKMRSY E222M 400AC [EXCEPT EA,EDG,EM]
C207	⚠ EC-435729N	C CE V CUT ECKMRSY E222M 400AC
C208	⚠ EC-435729N	C CE V CUT ECKMRSY E222M 400AC
C209	⚠ EC-435729N	C CE V CUT ECKMRSY E222M 400AC [EXCEPT EA,EDG,EM]
C210-A	EC-432918N	C EC V CUT YK 330M 400.0DC [EXCEPT EM]
C210-B	EC-422104N	C EC V CUT USW18 820M 400.0DC [EM]
C211	⚠ EC-435665N	C MMY V T05 B32529 473K 400DC
C212	⚠ EC-418759N	C CE V T05 CC45 SL121K 1000DC
C437	⚠ EC-416655N	C DBL LAYER T05 FM0H473Z 5.5DC
D3	ED-307573N	D SILICON H 1SS131T-77 T26 [EXCEPT EA,EM,G260/G270/G470EK]
D4	ED-425442N	D ZENER H MTZJ13A T26 [EXCEPT EA,EM,G260/G270/G470EK]
D5	ED-307573N	D SILICON H 1SS131T-77 T26 [EXCEPT EA,EM,SEG,G260/G270/G470EK]
D6	ED-307573N	D SILICON H 1SS131T-77 T26 [SEG]
D7	ED-434126N	D ZENER H MTZJ8.2A T26 [SEG]
D8	ED-307573N	D SILICON H 1SS131T-77 T26 [EK AND NON-AKAI BRAND MODELS]
D9	ED-307573N	D SILICON H 1SS131T-77 T26 [EK AND NON-AKAI BRAND MODELS]
D50	ED-307573N	D SILICON H 1SS131T-77 T26 [SEG]
D51	ED-307573N	D SILICON H 1SS131T-77 T26 [SEG]
D201	⚠ ED-418622N	D SILICON 1N4006N02 T05 800/1A
D202	⚠ ED-418622N	D SILICON 1N4006N02 T05 800/1A
D203	⚠ ED-418622N	D SILICON 1N4006N02 T05 800/1A
D204	⚠ ED-418622N	D SILICON 1N4006N02 T05 800/1A
D205	⚠ ED-436213N	D SILI.ERA2210AVRBT051000/0.5
D207	ED-307573N	D SILICON H 1SS131T-77 T26
D208	⚠ ED-435726N	D SILI.ERA92-02AVRB T05 200/1A
D209	⚠ ED-401046N	D SILICON RL104F-E T26 400/1A
D210	⚠ ED-435727N	D SCHOTT.ERB83-006L6 S12 60/2A
D211	⚠ ED-435667N	D SILI.H ERB91-02L6 S12 200/1A
D212	⚠ ED-435728N	D SILI.H ERD32-02J6 S12 200/3A
D214	⚠ ED-401046N	D SILICON RL104F-E T26 400/1A
D215-A	⚠ ED-425278N	D ZENER H MTZJ20A T26 [EXCEPT EM]
D215-B	⚠ ED-394991N	D ZENER H HZS18-3 T26 [EM]
D216	⚠ ED-394991N	D ZENER H HZS18-3 T26 [EM]
D218	ED-307573N	D SILICON H 1SS131T-77 T26
D219	ED-422519N	D ZENER H MTZJ4.3B T26
D225	ED-422252N	D ZENER H HZS12A3L T26
D229	ED-404242N	D ZENER H MTZJ5.6A T26
D230	ED-404242N	D ZENER H MTZJ5.6A T26 [EXCEPT SEG]
D231	ED-307573N	D SILICON H 1SS131T-77 T26
D232	ED-307573N	D SILICON H 1SS131T-77 T26
D401	ED-403280N	D SILICON 1N4002N02 T05 100/1A
D402	ED-390011N	D LED GL451 INFRARED
D403	ED-390012N	D LED GL4800 INFRARED
D404	ED-390012N	D LED GL4800 INFRARED
D407	ED-433962N	D ZENER H MTZJ7.5C T26
D411	ED-307573N	D SILICON H 1SS131T-77 T26
D412	ED-418820N	D ZENER H MTZJ5.1C T26
D413	ED-307573N	D SILICON H 1SS131T-77 T26
D414	ED-307573N	D SILICON H 1SS131T-77 T26
D415	ED-403280N	D [illegible]40[illegible]N02 T05 [illegible]00/1A
D416	ED-403280N	D SILICON 1N4002N02 T05 100/1A
D417	ED-403280N	D SILICON 1N4002N02 T05 100/1A
D418	ED-307573N	D SILICON H 1SS131T-77 T26
D602	ED-307573N	D SILICON H 1SS131T-77 T26

Ref. No.	Part No.	Description
D603	ED-307573N	D SILICON H 1SS131T-77 T26 [G260/G265EA/EDG/EM,G260ES/G260/G270/G271EK,G262/G265/G270EOH, G277EOG]
D604	ED-307573N	D SILICON H 1SS131T-77 T26 [4HEAD PAL MODELS]
D605	ED-307573N	D SILICON H 1SS131T-77 T26 [SEG]
D851	ED-307573N	D SILICON H 1SS131T-77 T26 [4HEAD PAL MODELS]
FL330	EO-433161N	COIL OSC1 V1233KN 70.0KHZ
FL401-A	EM-435269N	IND FL FV683GA CHARACTER [SEG]
FL401-B	EM-435268N	IND FL FV681GA CHARACTER [EXCEPT SEG]
FL601	EH-433119N	FILTER LC LP TZV-76C [SEG]
FR201	⚠ ER-397385N	R FUSE V T05 RF25SCVTP1/4WR20K [EM]
FR203	⚠ ER-400729N	R FUSE V T05 RF25SCVTP1/4WR47K
FR204	⚠ ER-428204N	R FUSE V T05RF25SVTP 1/4W 220J
FR206	⚠ ER-408829N	R FUSE V T05 RF25SCVTP1/4WR11K
FR401	⚠ ER-418648N	R FUSE V T05 RF25SCVTP1/4WR24K
FR402	⚠ ER-400729N	R FUSE V T05 RF25SCVTP1/4WR47K
FR403	⚠ ER-418648N	R FUSE V T05 RF25SCVTP1/4WR24K
F201	⚠ EF-393705N	FUSE 218 TIME 250V 1.00A
IC1	EI-337530N	IC UPC574J
IC2	EI-390053N	IC LA7910 [EXCEPT G260/G270/G470EK]
IC201	EI-422128N	IC TA76431S T05
IC301	EI-435314N	IC BA7797F-E2 FPE2T24E
IC401-A	EI-435736N2	IC M37777MAA1B4GP EXGSYS3 [SEG]
IC401-B	EI-435735N2	IC M37777MAA1B3GP EXGSYP3 [EXCEPT SEG AND NON-AKAI BRAND MODELS]
IC401-C	EI-437205N	IC M37777MAA1B1GP EXGSYN1 [NON-AKAI BRAND MODELS]
IC402	EI-353750N	IC NJM4558MB T1 T1T32P
IC404	EI-403233N	IC LB1641
IC405-A	EI-422442N	IC 24LC02BT/SN FP T12E [G260EA/EDG/EOH/EM/ES/EK,G460EA/EDG/EM,G261/G262/G263EOH]
IC405-B	EI-431275N	IC 24LC04BT/SN FP T12E [EXCEPT G260EA/EDG/EOH/EM/ES/EK, G460EA/EDG/EM,G261/G262/G263EOH]
IC406	EI-435187N	IC S-806H-Z TO-92 T05
IC407	EI-422145N	IC UPD16312GB-3B4
IC408	EI-428403N	IC SDA5649X FP T24E [EOG,SEG,G265/G465EDG,G270/G470EK, G270/G275/G276EOHAND NON-AKAI BRAND MODELS]
IC601-A	EI-432781N	IC LA7447BM [EXCEPT EDG,EM,ES]
IC601-B	EI-432784N	IC LA7440M [EDG,EM,ES]
IC602	EI-429889N	IC MM1112XFBE FPBT12E [SEG]
IC697-A	EI-435252N	IC LC89977M-TE-R FPR T16E [EXCEPT EDG,EM,ES]
IC697-B	EI-435272N	IC LC89978M-TE-R FPR T16E [EDG,EM,ES]
IC751	EI-428406N	IC LA7356M-TRM FPR T12E [EDG,EM,ES]
IC761	EI-435271N	IC LC74783JM-9648-TRM FPR T24E
IC851-A	EI-435270N	IC LA70001M-TRM FPR T24E [2HEAD MODELS]
IC851-B	EI-435229N	IC LA70011M-TRM FPR T24E [4HEAD MODELS]
L201	⚠ EO-433913N	COIL LF 1211F-1R5152C [EXCEPT EA,EDG,EM,ES]
L202	⚠ EO-435730N	COIL LF LF2020-333
L203	EO-422134N	COIL FIX 2 PC7-330K 330K
L205	EO-422134N	COIL FIX 2 PC7-330K 330K
L331-A	EO-426410N	COIL FIX 1 LHL06TB T05 561K [EA,EM,ES]
L331-B	EO-403270N	COIL FIX 1 EL0405RA T05 101J [EXCEPT EA,EM,ES]
L401	EO-432682N	COIL FIX 1 EL0405RA T05 220J
L601	EO-422479N	COIL FIX 1 LF-5.0S T26 330J
L602	EO-389412N	COIL FIX 1 LAV35VB007 T05 101J
L603	EO-422473N	COIL FIX 1 LF-5.0S T26 680J
L605	EO-422479N	COIL FIX 1 LF-5.0S T26 330J [EXCEPT EA,EK]
L606	EO-422477N	COIL FIX 1 LF-5.0S T26 470J
L610	EO-422478N	COIL FIX 1 LF-5.0S T26 390J [EDG,EM,ES]
L651	EO-422478N	COIL FIX 1 LF-5.0S T26 390J
L652	EO-422477N	COIL FIX 1 LF-5.0S T26 470J
L653	EO-422488N	COIL FIX 1 LF-5.0S T26 100J
L654-A	EO-428358N	COIL FIX 1 LF-5.0S T26 221J [EXCEPT SEG]
L654-B	EO-422483N	COIL FIX 1 LF-5.0S T26 181J [SEG]
L671-A	EO-422473N	COIL FIX 1 LF-5.0S T26 680J [EXCEPT SEG]
L671-B	EO-422475N	COIL FIX 1 LF-5.0S T26 560J [SEG]
L672	EO-428358N	COIL FIX 1 LF-5.0S T26 221J
L673	EO-428360N	COIL FIX 1 LF-5.0S T26 331J
L674	EO-422476N	COIL FIX 1 LF-5.0S T26 5R6J
L675	EO-389412N	COIL FIX 1 LAV35VB007 T05 101J
L697	EO-422474N	COIL FIX 1 LF-5.0S T26 6R8J [EXCEPT EDG,EM,ES]
L698	EO-389412N	COIL FIX 1 LAV35VB007 T05 101J
L761	EO-422479N	COIL FIX 1 LF-5.0S T26 330J
L762	EO-422481N	COIL FIX 1 LF-5.0S T26 220J [EXCEPT EA,EK]
L763	EO-389412N	COIL FIX 1 LAV35VB007 T05 101J
L851	EO-389412N	COIL FIX 1 LAV35VB007 T05 101J
MD1-A	BV-435423N1	RF CONVERTER MDLP3E008B G/I/K [EK AND NON-AKAI BRAND MODELS]
MD1-B	BV-435474N	RF CONVERT.YAA21-1121G EA [EA]
MD1-C	BV-429839N	RF CONVERTER YAA21-1045H G EO [EOH,EOG]
MD1-D	BV-387611N	RF CONVERTER YAA21-0808G EV [EM]
MD1-E	BV-434180N	RF CONVERT.YAA21-1108G G/K EDG [EDG]
MD1-F	BV-429901N	RF CONVERTER YAA41-0081G SECAM [SEG]
MD1-G	BV-429837N	RF CONVERTER YAA21-1046H I EK [ES]
PH201	⚠ ET-422113N	PHOTO COUPLER PS2561-1-V
PH401	ET-435413N	DETECTOR GP1U291Q [AKAI BRAND MODELS]
P201	⚠ EJ-416590N	SOCKET INLET CCT-2302-0371 2P
P401	EJ-433163N	PLUG TKC-G10P-A1 10P
P402	EJ-433184N	SOCKET TAS-X06X-G1 6P
P405	EJ-433007N	SOCKET 00 6216 007 000 7P
P406	EJ-431104N	SOCKET 00 6216 005 000 5P
P852-A	EJ-428388N	SOCKET 04FE-BT-VK-N 4P [2HEAD MODELS]
P852-B	EJ-433221N	SOCKET 06FE-BT-VK-N 6P [4HEAD MODELS]
R201	ER-422189N	R CT P BGR3N 3W 4R7K [EXCEPT EA,EDG,ES]
R206	ER-428396N	R OMF H S15 FS ERG2SH 2W 823J
R208-A	⚠ ER-810145N	R OMF H S15 FS ERG2SH 2W 221J [EXCEPT EM]
R208-B	⚠ ER-422512N	R OMF H S15 FS ERG2SH 2W 151J [EM]
R210-A	⚠ ER-428386N	R OMF V T05 FS ERX1SE 1W R56J [EXCEPT EM]
R210-B	⚠ ER-416671N	R OMF V T05 FS ERX1SE 1W R33J [EM]
SW401	ES-433183N	SW MICRO MPU10390MLB0
SW403	ES-414593N	SW TACT SOR-142HS T05
SW404	ES-414593N	SW TACT SOR-142HS T05
TR1	ET-392746N1	TR 2SA933AS R,S T05 [EA,EM]
TR2	ET-433072N	TR C.DTC114TKA T146T08E [EDG,EOH,ES,EOG]
TR3	ET-392746N1	TR 2SA933AS R,S T05

Ref. No.	Part No.	Description
TR4	ET-414816N	TR 2SC2668 Y T05
TR5	ET-433071N	TR C.DTC144TKA T146T08E [EXCEPT EA,EM,G260/G270/G470EK]
TR6	ET-416933N	TR C.2SD601A R,S TXT08E [EXCEPT EA,EM,G260/G270/G470EK]
TR7	ET-416932N	TR C.2SB709A R,S TXT08E [EA,EM,G260/G270/G470EK]
TR8	ET-430868N	TR C.DTC114EKA T146T08E
TR9	ET-416932N	TR C.2SB709A R,S TXT08E
TR10	ET-416933N	TR C.2SD601A R,S TXT08E
TR11	ET-416932N	TR C.2SB709A R,S TXT08E
TR12	ET-429897N	TR C.DTC144EKA T146T08E [EA,EM,EK,G260/G460EDG,G260/G460EDG, G260/G261/G270EOHAND 2 HEAD MODELS FORAKAI BRAND]
TR13	ET-429897N	TR C.DTC144EKA T146T08E [EK AND NON-AKAI BRAND M
TR50	ET-430868N	TR C.DTC114EKA T146T08E [SEG]
TR51	ET-416932N	TR C.2SB709A R,S TXT08E [SEG]
TR52	ET-416933N	TR C.2SD601A R,S TXT08E [SEG]
TR53	ET-429899N	TR C.DTA144TKA T146T08E [SEG]
TR54	ET-429897N	TR C.DTC144EKA T146T08E [SEG]
TR55	ET-416933N	TR C.2SD601A R,S TXT08E [SEG]
TR201-A	⚠ ET-428371N	TR 2SC4908 [EXCEPT EM]
TR201-B	⚠ ET-427538N	TR FET 2SK2056 LBS2AKAI [EM]
TR202-A	⚠ ET-401091J	TR 2SD2144S U,V,W T05 [EXCEPT EM]
TR202-B	⚠ ET-428407N	TR 2SC3616 M,L T05 [EM]
TR203	ET-386784N	TR DTA143TS T05
TR204	ET-415140N	TR DTA115TS T05
TR205	ET-392663N	TR 2SC1740S R,S T05
TR207	ET-428373N	TR C.2SD2318 E,U,V FPTLT16E
TR208	ET-392663N	TR 2SC1740S R,S T05
TR210	ET-422154N	TR 2SB1426 Q,R T05 [SEG]
TR211	ET-416697N	TR 2SD2396 J,K
TR212	ET-392663N	TR 2SC1740S R,S T05
TR213	ET-392663N	TR 2SC1740S R,S T05
TR214	ET-368786N	TR DTC143ZS T05
TR216	ET-364023N	TR DTC114ES T05 [SEG]
TR217	⚠ ET-428407N	TR 2SC3616 M,L T05 [EM]
TR301	ET-433072N	TR C.DTC114TKA T146T08E [EXCEPT G260/G261/G263/G267/G275EOH, G267EOG,2 HEAD SEGAND 2 HEAD MODELS FOR NON-AKAI BRAND]
TR302	ET-433072N	TR C.DTC114TKA T146T08E [EXCEPT G260/G261/G263/G267/G275EOH, G267EOG,2 HEAD SEGAND 2 HEAD MODELS FOR NON-AKAI BRAND]
TR303	ET-433072N	TR C.DTC114TKA T146T08E [EDG,EM,ES]
TR305	ET-433976N	TR C.DTA114TKA T146T08E
TR306	ET-433072N	TR C.DTC114TKA T146T08E
TR307	ET-433071N	TR C.DTC144TKA T146T08E [EXCEPT G260/G261/G263/G267/G275EOH, G267EOG,2 HEAD SEGAND 2 HEAD MODELS FOR NON-AKAI BRAND)
TR308	ET-433072N	TR C.DTC114TKA T146T08E [EXCEPT G260/G261/G263/G267/G275EOH, G267EOG,2 HEAD SEGAND 2 HEAD MODELS FOR NON-AKAI BRAND]
TR331	ET-419014N	TR 2SC1741S Q,R T05
TR332	ET-432937N	TR C.DTC143TKA T146T08E
TR333	ET-392663N	TR 2SC1740S R,S T05
TR401	ET-390009N	TR PHOTO PT493F
TR402	ET-390009N	TR PHOTO PT493F
TR403	ET-390010N	TR PHOTO PT4800
TR404	ET-390010N	TR PHOTO PT4800
TR405	ET-361961N	TR DTC144ES T05
TR406	ET-392746N1	TR 2SA933AS R,S T05
TR407	ET-433918N	TR 2SB1240 Q,R T05
TR408	ET-364645N	TR DTC143ES T05
TR409	ET-364645N	TR DTC143ES T05
TR601	ET-429898N	TR C.DTA114EKA T146T08E
TR603	ET-428249N	TR C.2SC2412K R,S T146T08E
TR604	ET-361961N	TR DTC144ES T05
TR606	ET-386058N	TR D-C.IMX1 T110T08E
TR607	ET-386058N	TR D-C.IMX1 T110T08E
TR608	ET-429896N	TR C.DTA144EKA T146T08E [EXCEPT EA,EK]
TR611	ET-428249N	TR C.2SC2412K R,S T146T08E [EDG,EM,ES]
TR612	ET-366753N	TR DTA114ES T05
TR614	ET-361961N	TR DTC144ES T05 [EDG,EM,ES]
TR615	ET-361961N	TR DTC144ES T05 [SEG]
TR652	ET-392663N	TR 2SC1740S R,S T05
TR653	ET-429896N	TR C.DTA144EKA T146T08E
TR654	ET-392663N	TR 2SC1740S R,S T05
TR656	ET-361961N	TR DTC144ES T05 [SEG]
TR657	ET-392663N	TR 2SC1740S R,S T05
TR658	ET-361961N	TR DTC144ES T05 [EDG,EM,ES]
TR671	ET-433071N	TR C.DTC144TKA T146T08E [SEG]
TR672	ET-386058N	TR D-C.IMX1 T110T08E
TR674	ET-428249N	TR C.2SC2412K R,S T146T08E
TR719	ET-429898N	TR C.DTA114EKA T146T08E [SEG]
TR761	ET-428248N	TR C.2SA1037AK R,S T146T08E
TR762	ET-392746N1	TR 2SA933AS R,S T05
TU1-A	EE-435225N	TV TUNER TELE4-045A [EXCEPT EA,EM,SEG,G260/G270/G270EK]
TU1-B	EE-435227N	TV TUNER TELE1-012A [EA,EM]
TU1-C	EE-435224N	TV TUNER TELB1-016A [G260/G270/G470EK]
TU1-D	EE-435226N	TV TUNER TELE4-049A [SEG]
T201	⚠ BT-433228N	TRANS POW V1239A-TAM
X401	EI-425240N	OSC X'TALAPS1011A 16.000MHZ
X402	EI-431323N	OSC X'TAL C-002RX 32.768KHZ
X601-A	EI-435808N	OSC X'TALAPS1031A 4.433619MHZ [EXCEPT EDG,EM,ES]
X601-B	EI-435809N	OSC X'TALAPS1030A 3.579545MHZ [EDG,EM,ES]
X602	EI-435808N	OSC X'TALAPS1031A 4.433619MHZ [EDG,EM,ES]
X761	EI-416872N	OSC X'TALAPS1004A 17.734475MH
1	SZ-433649N	HOLDER S/E SENSOR (SG)
2	SZ-428508N1	HOLDER PHOTO SENSOR (SG)
3	SZ-433648N1	HOLDER D-LED (SG)

6. FRONT P.C. BOARD (G460/G465EA,G265/G465EDG, G460EM, G277/G477EOG, G270/G470SEG, G265/G267/G270/G275/G276/G467/G475EOH)

Ref. No.	Part No.	Description
D500	ED-307573N	D SILICON H 1SS131T-77 T26
D501	ED-307573N	D SILICON H 1SS131T-77 T26
PJ551	EJ-428007N	PIN J JPJ2022-01-040 YELLOW 1P
PJ552	EJ-435748N	PIN J JPJ2022-01-010 BLACK 1P
P550	EJ-435305N	SOCKET 04FE-ST-VK-N 4P
TR550	ET-392663N	TR 2SC1740S R,S T05
TR551	ET-392663N	TR 2SC1740S R,S T05

7. RC SENSOR P.C. BOARD (ONLY MODELS FOR NON-AKAI BRAND)

Ref. No.	Part No.	Description
PH402	ET-428361N	DETECTOR GP1U281X

8. VIF-NOR P.C. BOARD (EXCEPT EDG,SEG)

Ref. No.	Part No.	Description
FL1-A	EH-435792N	FILTER CE G1984M B/G 38.9M [EXCEPT ES,EK]
FL1-B	EH-435790N	FILTER CE J1956M I 38.9M [ES,EK]
FL2-A	EH-433121N	FILTER CE SFSH5.5MCB-TF21 T05 [EXCEPT ES,EK]
FL2-B	EH-433122N	FILTER CE SFSH6.0MCB-TF21 T05 [ES,EK]
FL3-A	EH-368948N	FILTER CE TPS5.5MWA 5.5000MHZ [EXCEPT EM,ES,EK]
FL3-B	EH-405642N	FILTER CE TPS6.0MB-TF21 T05 [ES,EK]
FL3-C	EH-416618N	FILTER CE TPS5.5MB-TF21 T05 [EM]
IC1	EI-368809N	IC M51496P
L1-A	EO-428259N	COIL FIX 1 EL0405RA T05 R68K [EXCEPT ES,EK]
L1-B	EO-432680N	COIL FIX 1 EL0405RA T05 1R5J [ES,EK]
L7-A	EO-427708N	COIL FIX 1 EL0405RA T05 120J [EXCEPT EM]
L7-B	EO-410256N	COIL FIX 1 EL0405RA T05 100J [EM]
L8-A	EO-408956N	COIL FIX 1 EL0405RA T05 390J [EM]
L8-B	EO-403273N	COIL FIX 1 EL0405RA T05 330J [EXCEPT EM]
TR1	ET-432740N	TR C.2SC2480 T,S TXT08E
TR2	ET-416932N	TR C.2SB709A R,S TXT08E
VL3-A	EO-435419N	COIL TUN1 JPS-1366FM 5.5M NOR. [EXCEPT ES,EK]
VL3-B	EO-435421N	COIL TUN1 JPS-1331AFM6.0M NOR. [ES,EK]
VL4	EO-435416N	COIL TUN1 JPS-002AFT38.9M NOR.
VL5	EO-435417N	COIL TUN1 JPS-1322A LLD 38.9M

9. VIF-EDG P.C. BOARD (EDG)

Ref. No.	Part No.	Description
FL1	EH-435679N	FILTER CE K2960M D/K 38.9M
FL2	EH-414623N	FILTER CE TPS6.5MB-TF21 T05
FL3	EH-368948N	FILTER CE TPS5.5MWA 5.5000MHZ
FL51	EH-433123N	FILTER CE SFSH6.5MCB-TF21 T05
FL52	EH-433121N	FILTER CE SFSH5.5MCB-TF21 T05
FL53	EH-433122N	FILTER CE SFSH6.0MCB-TF21 T05
IC1	EI-368809N	IC M51496P
L1	EO-428259N	COIL FIX 1 EL0405RA T05 R68K
L5	EO-416716N	COIL FIX 1 EL0405RA T05 8R2J
L6	EO-408956N	COIL FIX 1 EL0405RA T05 390J
L51	EO-416716N	COIL FIX 1 EL0405RA T05 8R2J
L52	EO-408834N	COIL FIX 1 EL0405RA T05 221J
TR1	ET-432740N	TR C.2SC2480 T,S TXT08E
TR2	ET-416932N	TR C.2SB709A R,S TXT08E
TR3	ET-416933N	TR C.2SD601A R,S TXT08E
TR4	ET-416932N	TR C.2SB709A R,S TXT08E
TR51	ET-416933N	TR C.2SD601A R,S TXT08E
TR52	ET-416933N	TR C.2SD601A R,S TXT08E
VL2	EO-435421N	COIL TUN1 JPS-1331AFM6.0M NOR.
VL3	EO-435416N	COIL TUN1 JPS-002AFT38.9M NOR.
VL4	EO-435417N	COIL TUN1 JPS-1322A LLD 38.9M
VR1	EV-432752N	R S-FIX V T05 RH063LC 0.1W 223
X1	EI-368829N	OSC CE CSB512P

10. VIF-SEG P.C. BOARD (SEG)

Ref. No.	Part No.	Description
D1	ED-416930N	D SILICON C.MA77-TX TXT08E
D2	ED-416930N	D SILICON C.MA77-TX TXT08E
D3	ED-416930N	D SILICON C.MA77-TX TXT08E
D5	ED-432743N	D ZENER C.RD5.6MB2-T1 T1T08E
D6	ED-432744N	D SILICON C.MC2840-1 T1T08E
FL1	EH-432630N	FILTER CE SAF41MA70Z
FL2	EH-432623N	FILTER CE SAF32.4MCA70Z
FL3	EH-432629N	FILTER CE SAF38.9MZW70Z
FL4	EH-432626N	FILTER CE SAF33.4MC70Z
FL5	EH-368948N	FILTER CE TPS5.5MWA 5.5000MHZ
FL6	EH-414623N	FILTER CE TPS6.5MB-TF21 T05
FL7	EH-433121N	FILTER CE SFSH5.5MCB-TF21 T05
IC1	EI-425646N	IC UPC1823ACU
L2	EO-432680N	COIL FIX 1 EL0405RA T05 1R5J
L3	EO-410256N	COIL FIX 1 EL0405RA T05 100J
L4	EO-410256N	COIL FIX 1 EL0405RA T05 100J
L5	EO-410256N	COIL FIX 1 EL0405RA T05 100J
L6	EO-432682N	COIL FIX 1 EL0405RA T05 220J
L7	EO-410256N	COIL FIX 1 EL0405RA T05 100J
L8	EO-410256N	COIL FIX 1 EL0405RA T05 100J
L11	EO-410256N	COIL FIX 1 EL0405RA T05 100J
L14	EO-432683N	COIL FIX 1 EL0405RA T05 3R3J
L15	EO-403273N	COIL FIX 1 EL0405RA T05 330J
TR2	ET-432740N	TR C.2SC2480 T,S TXT08E
TR4	ET-429897N	TR C.DTC144EKA T146T08E
TR5	ET-429897N	TR C.DTC144EKA T146T08E
TR6	ET-429896N	TR C.DTA144EKA T146T08E
TR7	ET-429896N	TR C.DTA144EKA T146T08E
TR8	ET-432937N	TR C.DTC143TKA T146T08E
TR9	ET-416933N	TR C.2SD601A R,S TXT08E
TR10	ET-416932N	TR C.2SB709A R,S TXT08E
TR14	ET-416932N	TR C.2SB709A R,S TXT08E
TR15	ET-429897N	TR C.DTC144EKA T146T08E
TR16	ET-416933N	TR C.2SD601A R,S TXT08E
TR18	ET-432740N	TR C.2SC2480 T,S TXT08E
VC1	EC-412095N	C S-FIX H T05 TZ03Z100TR169
VL9	EO-435243N	COIL TUN1 JPS-243 SIF B/G SEG
VL10	EO-435244N	COIL TUN1 JPS-516 VCO 38.9 SEG
VL16	EO-435245N	COIL TUN1 JPS-515TRAP40.4M SEG
VR1	EV-432758N	R S-FIX H T05 RH063MC 0.1W 105
X1	EO-432745N	OSC CE CSB500F32 500KHZ

11. RCA BLK (EA,EM,ES)

Ref. No.	Part No.	Description
IC501	EI-332259	IC TC4052BP [G460EA/EM,G465EA]
IC502	EI-416647N	IC MM1111XS [G260EA/EM/ES,G265EA/EM]
L501	EO-389412N	COIL FIX 1 LAV35VB007 T05 101J
L502	EO-389412N	COIL FIX 1 LAV35VB007 T05 101J
PJ501	EJ-435318N	PIN J YKC21-5616A 5P
P502	EJ-435305N	SOCKET 04FE-ST-VK-N 4P [G460EA/EM,G465EA]
TR501	ET-392746N1	TR 2SA933AS R,S T05
TR502	ET-392663N	TR 2SC1740S R,S T05
TR503	ET-361961N	TR DTC144ES T05 [G460EA/EM,G465EA]
TR504	ET-361961N	TR DTC144ES T05 [G460EA/EM,G465EA]
TR505	ET-392663N	TR 2SC1740S R,S T05 [G460EA/EM,G465EA]
TR506	ET-392663N	TR 2SC1740S R,S T05
TR507	ET-392663N	TR 2SC1740S R,S T05
TR508	ET-392663N	TR 2SC1740S R,S T05
TR509	ET-392663N	TR 2SC1740S R,S T05
TR510	ET-364082N	TR DTA114TS T05
TR511	ET-364023N	TR DTC114ES T05
TR512	ET-392663N	TR 2SC1740S R,S T05
TR513	ET-392663N	TR 2SC1740S R,S T05
TR514	ET-364492N	TR DTC114TS T05
TR515	ET-392663N	TR 2SC1740S R,S T05
TR516	ET-392663N	TR 2SC1740S R,S T05

12. SCART P.C. BOARD (EXCEPT EA,EM,ES)

Ref. No.	Part No.	Description
IC901	EI-435316N	IC BH7634AS [EXCEPT EK,G260/G460EDG,G260/G261/G263/G270EOH AND 2 HEAD MODELS FOR NON-AKAI BRAND]
IC902	EI-332259	IC TC4052BP [EXCEPT G260/G460EDG,G260/270EK,G260/G261/G262/G267/G465EOH,G260/G265/G460/G465SEGAND 4 HEAD MODELS FOR NON-AKAI BRAND]
IC903	EI-416647N	IC MM1111XS [G260/G460EDG,G260/270EK,G260/G261EOH]
IC960	EI-432899N	IC LA7337 [SEG]
L901	EO-389412N	COIL FIX 1 LAV35VB007 T05 101J
L902	EO-389412N	COIL FIX 1 LAV35VB007 T05 101J
L963	EO-389412N	COIL FIX 1 LAV35VB007 T05 101J [SEG]
L964	EO-422474N	COIL FIX 1 LF-5.0S T26 6R8J [SEG]
L965	EO-422488N	COIL FIX 1 LF-5.0S T26 100J [SEG]
L966	EO-422481N	COIL FIX 1 LF-5.0S T26 220J [SEG]
L967	EO-422479N	COIL FIX 1 LF-5.0S T26 330J [SEG]
L968	EO-422475N	COIL FIX 1 LF-5.0S T26 560J [SEG]
L969	EO-425202N	COIL FIX 1 LF-5.0S T26 270J [SEG]
PJ901	EJ-435428N	SOCKET 0350536100 BLACK 21P
PJ902	EJ-435428N	SOCKET0350536100BLAC21P [EXCEPT G260/G460EDG,G260G270EK,G260/G261EOH]
P903	EJ-435305N	SOCKET 04FE-ST-VK-N 4P [G265/G465EDG,G270/G470SEG,G277/G477EOG,G265/G267/G270/G275/G276/G467/G475EOH]
TR901	ET-429899N	TR C.DTA144TKA T146T08E [EK,G260/G460EOG,G260/G261/G263/G270EOH AND 2HEAD MODELS FOR NON-AKAI BRAND]
TR902	ET-433071N	TR C.DTC144TKA T146T08E [G271/G470EK]
TR903	ET-416932N	TR C.2SB709A R,S TXT08E
TR904	ET-392746N1	TR 2SA933AS R,S T05 [EXCEPTG260/G460EDG,G260/G270EK,G260/G261/G262/267/G465EOH,G260/G265/G460/G465SEG AND 4 HEAD MODELS FOR NON-AKAI BRAND]
TR905	ET-392746N1	TR 2SA933AS R,S T05 [EXCEPT G262/G465EOH,G267EOG,G260/G265/G460/G465SGGAND 4 HEAD MODELS FOR NON-AKAI BRAND]
TR906	ET-392663N	TR 2SC1740S R,S T05
TR907	ET-392663N	TR 2SC1740S R,S T05
TR908	ET-364492N	TR DTC114TS T05
TR909	ET-392663N	TR 2SC1740S R,S T05
TR910	ET-392663N	TR 2SC1740S R,S T05
TR911	ET-416933N	TR C.2SD601A R,S TXT08E
TR912	ET-392663N	TR 2SC1740S R,S T05
TR913	ET-392663N	TR 2SC1740S R,S T05
TR914	ET-392663N	TR 2SC1740S R,S T05
TR915	ET-364082N	TR DTA114TS T05
TR916	ET-430868N	TR C.DTC114EKA T146T08E
TR917	ET-416932N	TR C.2SB709A R,S TXT08E [EXCEPT G26/G460EDG,G260/G270EK,G260/G261EOH]
TR918	ET-433071N	TR C.DTC144TKA T146T08E [G271/G470EK,G263/G270EOH AND 2 HEAD MODELS FOR NON-AKAI BRAND]
TR919	ET-433071N	TR C.DTC144TKA T146T08E [G271/G470EK,G263/G270EOHAND 2 HEAD MODELS FOR NON-AKAI BRAND]
TR920	ET-429897N	TR C.DTC144EKA T146T08E [EXCEPT EK,G260/G460EDG,G260/G261/G263/G270EOH AND 2 HEAD MODELS FOR NON-AKAI BRAND]
TR921	ET-416932N	TR C.2SB709A R,S TXT08E [EXCEPT EK,G260/G460EDG,G260/G261/G263/G270EOH AND 2 HEAD MODELS FOR NON-AKAI BRAND]
TR963	ET-368834N	TR DTA144TS T05 [SEG]
TR964	ET-392663N	TR 2SC1740S R,S T05 [SEG]
TR965	ET-373201N	TR DTC144TS T05 [SEG]
TR966	ET-392663N	TR 2SC1740S R,S T05 [SEG]
TR967	ET-429898N	TR C.DTA114EKA T146T08E [SEG]

13. OPERATION P.C. BOARD

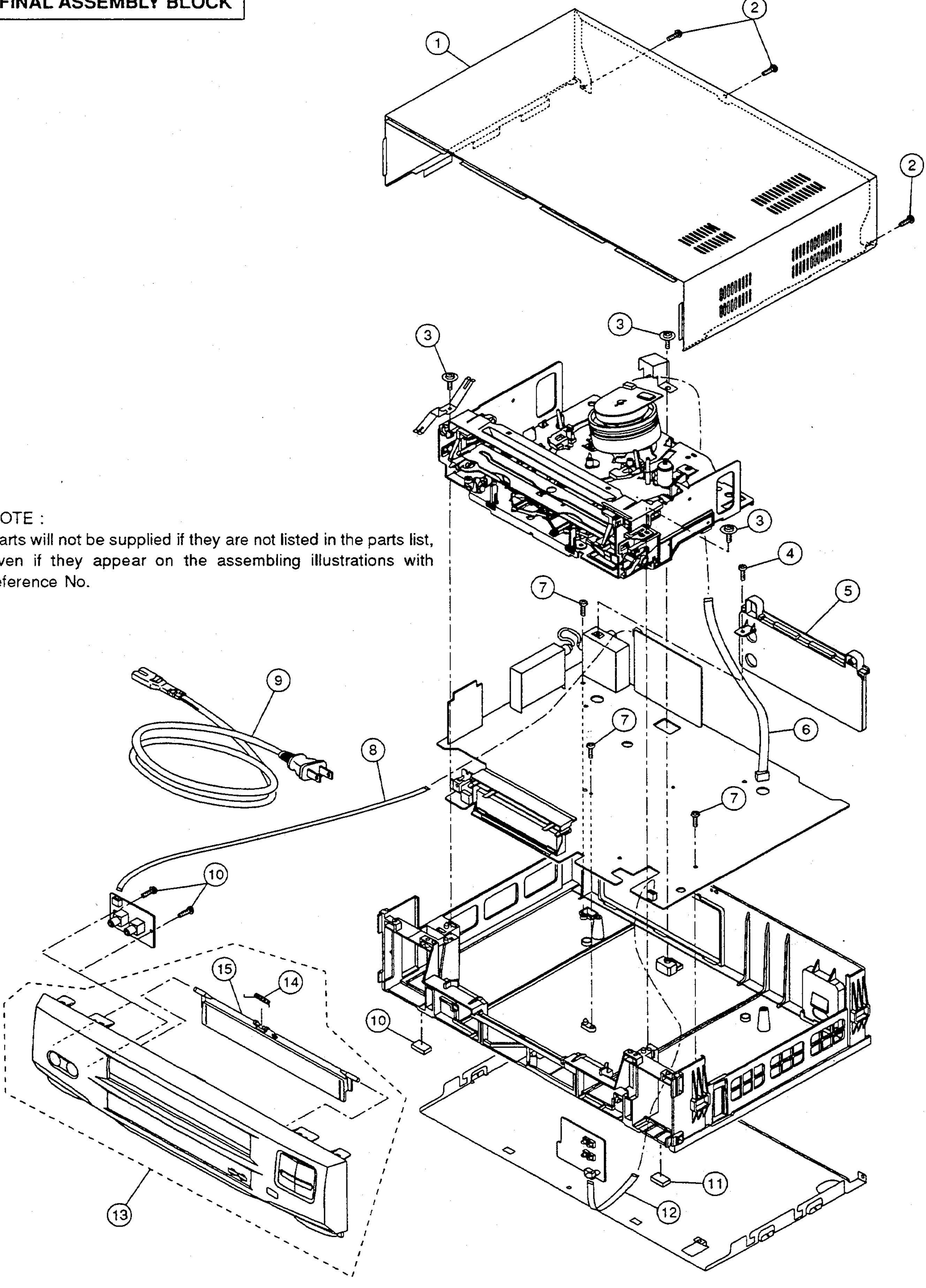
Ref. No.	Part No.	Description
P407	EJ-433223N	SOCKET 05FE-ST-VK-N 5P
SW405	ES-414593N	SW TACT SOR-142HS T05
SW406	ES-414593N	SW TACT SOR-142HS T05
SW407	ES-414593N	SW TACT SOR-142HS T05
SW408	ES-414593N	SW TACT SOR-142HS T05
SW409	ES-414593N	SW TACT SOR-142HS T05

14. REG-EK P.C. BOARD (EK AND NON-AKAI BRAND MODELS)

Ref. No.	Part No.	Description
D1	ED-433962N	D ZENER H MTZJ7.5C T26
FR1	⚠ ER-401039J	R FUSE V T05 ERD2FCV 1/4W 4R7J
IC1	EI-377101	IC UPC7805HF
TR2	ET-392746N1	TR 2SA933AS R,S T05

FINAL ASSEMBLY BLOCK

NOTE :
Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations with reference No.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15. FINAL ASSEMBLY BLOCK

Ref. No.	Part No.	Description
1-A	SP-433763N	COVER UPPER NX (SG) [BLACK]
1-B	SP-436153N	COVER UPPER NX FLAT PLATE S(SG) [SILVER]
2	ZS-393515N	BT BID30X10STL BZN (SG)
3	ZS-426416N	BT PAN30X10STL CMT C080 (SG)
4	ZS-323728N	BID30X05STL CMT (SG)
5-A	SP-434917N	PANEL REAR JACK EA (SG) [EA/EM]
5-B	SP-434918N	PANEL REAR JACK EDG (SG) [G260/G460EDG]
5-C	SP-434919N	PANEL REAR JACK EDG2 (SG) [G265/G465EDG]
5-D	SP-434920N	PANEL REAR JACK EK (SG) [G260/G270EK]
5-E	SP-434926N	PANEL REAR JACK EK2 (SG) [G271/G470EKAND 2HEAD MODELS FOR NON-AKAI BRAND]
5-F	SP-435814N	PANEL REAR JACK ES (SG) [ES]
5-G	SP-434921N	PANEL REAR JACK EOH (SG) [G260/G261EOH]
5-H	SP-434922N	PANEL REAR JACK EOH2 (SG) [G263/G270EOH]
5-I	SP-435953N	PANEL REAR JACK EOH3 (SG) [G262/G265/G267/G275/G276/G465/G467/G475EOH AND 4 HEAD MODELS FOR NON-AKAI BRAND]
5-J	SP-434925N	PANEL REAR JACK EOG (SG) [EOG]
5-K	SP-434924N	PANEL REAR JACK SEG (SG) [SEG]
6	EW-433226N1	CORD EX FFC MA-DM L185 7P
7	ZS-376521N	BT BID30X08STL CMT (SG)
8	EW-435334N	CORD FFC BD P1.25 L300 4P
9-A	⚠ EW-430842N	AC CORD 200S SF200 SF201 E [EXCEPT EA,EK]
9-B	⚠ EW-425599N	AC CORD 200S CW2101CW4771 B S [EA]
9-C	⚠ EW-436245N	AC CORD 200S SF628 SF201 B [EK]
10	ZS-426424N	PT BID26X08STL CMT (SG)
11	SA-422907N	FOOT AX (SG)
12	EW-433224N	CORD FFC BD P1.25 L50 5P
13-A	BD-435122N	PANEL F(C)G260EA PART (SG)
13-B	BD-435123N	PANEL F(C)G260EDG PART (SG)
13-C	BD-435127N	PANEL F(C)G260EM PART (SG)
13-D	BD-435125N	PANEL F(C)G260EOH(Y1) PART(SG)
13-E	BD-435055N	PANEL F(C)G260EK PART (SG)
13-F	BD-435054N	PANEL F(C)G260ES PART (SG)
13-G	BD-436490N	PANEL F(C)G261EOH(Y1) PART(SG)
13-H	BD-436489N	PANEL F(C)G262EOH(Y2) PART(SG)
13-I	BD-435124N	PANEL F(C)G263EOH(E) PART (SG)
13-J	BD-435129N	PANEL F(C)G265EA PART (SG)
13-K	BD-435130N	PANEL F(D)G265EDG PART (SG)
13-L	BD-435133N	PANEL F(C)G265EM PART(SG)
13-M	BD-435132N	PANEL F(D)G265EOH(Y1) PART(SG)
13-N	BD-436491N	PANEL F(D)G267EOH(Y2)PART (SG)
13-O	BD-435051N	PANEL F(C)G267EOG PART (SG)
13-P	BD-435062N	PANEL F(D)G270EOH(E) PART (SG)
13-Q	BD-435049N	PANEL F(C)G270EK PART (SG)
13-R	BD-435050N	PANEL F(C)G271EK PART (SG)
13-S	BD-435053N	PANEL F(D)G275EOH PART (SG)
13-T	BD-435063N	PANEL F(D)G276EOH(Y1) PART(SG)
13-U	BD-435052N	PANEL F(D)G277EOG PART (SG)
13-V	BD-435177N	PANEL F(C)G260SEG PART (SG)
13-W	BD-435178N	PANEL F(C)G265SEG PART (SG)
13-X	BD-435179N	PANEL F(D)G270SEG PART (SG)
13-Y	BD-434979N	PANEL F(D)G460EA PART (SG)
13-Z	BD-434980N	PANEL F(C)G460EDG PART (SG)
13-a	BD-434982N	PANEL F(D)G460EMPART (SG)
13-b	BD-434984N	PANEL F(D)G465EA PART (SG)
13-c	BD-434985N	PANEL F(D)G465EDG PART (SG)
13-d	BD-434986N	PANEL F(C)G465EOH PART (SG)
13-e	BD-435925N	PANEL F(D)G467EOH PART (SG)
13-f	BD-434987N	PANEL F(C)G470EK PART (SG)
13-g	BD-436543N	PANEL F(D)G475EOH(E) PART (SG) [BLACK]
13-h	BD-434988N	PANEL F(D)G475EOH(Y1) PART(SG) [SILVER]
13-i	BD-434989N	PANEL F(D)G477EOG PART (SG)
13-j	BD-434937N	PANEL F(C)G460SEG PART (SG)
13-k	BD-434938N	PANEL F(C)G465SEG PART (SG)
13-l	BD-434939N	PANEL F(D)G470SEG PART (SG)
13-m	BD-436334N	PANEL F(M)VCR3717CE PART (SG)
13-n	BD-436335N	PANEL F(M)VCR637NE PART (SG)
13-o	BD-436336N	PANEL F(A)VCR4717NE PART (SG)
13-p	BD-436337N	PANEL F(A)VCR7357NE PART (SG)
13-q	BD-436356N	PANEL F(M)VCR3747CE PART (SG)
13-r	BD-436357N	PANEL F(M)VCR837NE PART (SG)
13-s	BD-436358N	PANEL F(A)VCR4747NE PART (SG)
13-t	BD-436359N	PANEL F(A)VCR7457NE PART (SG)
14	ZG-429541N	SP MASK(4) (SG)
15-A	SE-435157N	MASK CASSETTE VS-G260(E) (SG) [G260EA]
15-B	SE-435158N	MASK CASSETTE VS-G260(E2) (SG) [G260EDG]
15-C	SE-435159N	MASK CASSETTE VS-G260(E3) (SG) [G260EK]
15-D	SE-435160N	MASK CASSETTE VS-G260(E4) (SG) [G260EOH]
15-E	SE-435162N	MASK CASSETTE VS-G260(E5) (SG) [G260EM]
15-F	SE-435163N	MASK CASSETTE VS-G260(E6) (SG) [G260ES]
15-G	SE-436496N	MASK CASSETTE VS-G261(E) (SG) [G261EOH]
15-H	SE-436121N	MASK CASSETTE VS-G262(E) (SG) [G262EOH]
15-I	SE-436120N	MASK CASSETTE VS-G263(E) (SG) [G263EOH]
15-J	SE-435164N	MASK CASSETTE VS-G265(E) (SG) [G265EA]
15-K	SE-435165N	MASK CASSETTE VS-G265(E2) (SG) [G265EDG]
15-L	SE-435167N	MASK CASSETTE VS-G265(E4) (SG) [G265EOH]
15-M	SE-435168N	MASK CASSETTE VS-G265(E5) (SG) [G265EM]
15-N	SE-436122N	MASK CASSETTE VS-G267(E) (SG) [G267EOH]
15-O	SE-435096N	MASK CASSETTE VS-G267(G) (SG) [G267EOG]
15-P	SE-435090N	MASK CASSETTE VS-G270(E) (SG) [G270EK]
15-Q	SE-435091N	MASK CASSETTE VS-G270(E2) (SG) [G270EOH]
15-R	SE-435095N	MASK CASSETTE VS-G271(E) (SG) [G271EK]
15-S	SE-435098N	MASK CASSETTE VS-G275(E) (SG) [G275EOH]
15-T	SE-435088N	MASK CASSETTE VS-G276(E) (SG) [G276EOH]
15-U	SE-435097N	MASK CASSETTE VS-G277(G) (SG) [G277EOG]
15-V	SE-435829N	MASK CASSETTE VS-G260(F) (SG) [G260SEG]
15-W	SE-435828N	MASK CASSETTE VS-G265(F) (SG) [G265SEG]
15-X	SE-435827N	MASK CASSETTE VS-G270(F) (SG) [G270SEG]
15-Y	SE-434945N	MASK CASSETTE VS-G460(E) (SG) [G460EA]
15-Z	SE-435011N	MASK CASSETTE VS-G460(E2) (SG) [G460EDG]
15-a	SE-435016N	MASK CASSETTE VS-G460(E3) (SG) [G460EM]
15-b	SE-435018N	MASK CASSETTE VS-G465(E) (SG) [G465EA]
15-c	SE-435019N	MASK CASSETTE VS-G465(E2) (SG) [G465EDG]

Ref. No.	Part No.	Description
15-d	SE-435020N	MASK CASSETTE VS-G465(E3) (SG) [G465EOH]
15-e	SE-436541N	MASK CASSETTE VS-G467(E) (SG) [G467EOH]
15-f	SE-435021N	MASK CASSETTE VS-G470(E) (SG) [G470EK]
15-g	SE-435022N	MASK CASSETTE VS-G475(E) (SG) [G475EOH] [SILVER]
15-h	SE-436542N	MASK CASSETTE VS-G475(E2) (SG) [G475EOH] [BLACK]
15-i	SE-435027N	MASK CASSETTE VS-G477(G) (SG) [G477EOG]
15-j	SE-434949N	MASK CASSETTE VS-G460(F) (SG) [G460SEG]
15-k	SE-434950N	MASK CASSETTE VS-G465(F) (SG) [G465SEG]
15-l	SE-434954N	MASK CASSETTE VS-G470(F) (SG) [G470SEG]
15-m	SE-436449N	MASK CASSETTE NOKIA(1) (SG) [VCR3017CE,VCR3047CE]
15-n	SE-436451N	MASK CASSETTE SALORA(1) (SG) [VCR1637NE,VCR1837NE]
15-o	SE-436416N	MASK CASSETTE LUXOR (SG) [VCR4017NE,VCR4047NE]
15-p	SE-436418N	MASK CASSETTE FINLUX (SG) [VCR6257NE,VCR6457NE]

16. ACCESSORY

Ref. No.	Part No.	Description
1	EW-348414N	CORD PAL [EXCEPT SEG]
2	AV-348415N	CORD SECAM [SEG]
3	EW-427525N	CORD 21PIN AV CABLE [SEG]
4-A	AV-433946U1	REMOCON RC-X156E [G260EK]
4-B	AV-436284N	REMOCON RC-X168E [G270/G271/G470EK]
4-C	AV-435320N	REMOCON RC-Y101E [G260EA/ES,G260/G460EDG,G260/G261/G262/G263EOH]
4-D	AV-435329N	REMOCON RC-Y101F [G260/G460SEG]
4-E	AV-435731N	REMOCON RC-Y102E [G260/G460EM,G460EA]
4-F	AV-435322N	REMOCON RC-Y121E [G265/G275/G276/G465EOH]
4-G	AV-435635N	REMOCON RC-Y121G [G267EOG]
4-H	AV-435331N	REMOCON RC-Y121F [G265/G465SEG]
4-I	AV-435325N	REMOCON RC-Y122E [G265/G465EDG,G267/G270/G467/G475EOH]
4-J	AV-435326N	REMOCON RC-Y122G [G277/G477EOG]
4-K	AV-435332N	REMOCON RC-Y122F [G270/G470SEG]
4-L	AV-435321N	REMOCON RC-Y131E [G265/G465EA]
4-M	AV-435634N	REMOCON RC-Y132E [G265EM]
4-N	AV-437211N	REMOCON RC-Y122NK [VCR3017CE,VCR3047CE]
4-O	AV-437212N	REMOCON RC-Y122SL [VCR1637NE,VCR1837NE]
4-P	AV-437210N	REMOCON RC-Y122LX [VCR4017NE,VCR4047NE]
4-Q	AV-437209N	REMOCON RC-Y122FL [VCR6257NE,VCR6457NE]
5-A	SC-734097N	COVER BATTERY (EX-1) [RC-Y101/Y111/Y121/Y131]
5-B	SC-734098N	COVER BATTERY (EX-2) [RC-Y102/Y112/Y122/Y132]
5-C	SC-734100N	COVER BATTERY (EX-NK) [RC-Y122NK]
5-D	SC-734101N	COVER BATTERY (EX-SL) [RC-Y122SL]
5-E	SC-734102N	COVER BATTERY (EX-LX) [RC-Y122LX]
5-F	SC-734103N	COVER BATTERY (EX-FL) [RC-Y122FL]
5-g	SC-733720N1	COVER BATTERY [RC-X156/X168]
6	SC-734099N	COVER (EX-2) [RC-Y102/Y112/Y122/Y132]

INDEX

Part No.	Ref. No.
AV348415N	16-2
AV433946N1	16-4-A
AV435320N	16-4-C
AV435321N	16-4-L
AV435322N	16-4-F
AV435325N	16-4-I
AV435326N	16-4-J
AV435329N	16-4-D
AV435331N	16-4-H
AV435332N	16-4-K
AV435634N	16-4-M
AV435635N	16-4-G
AV435731N	16-4-E
AV436284N	16-4-B
AV437209N	16-4-Q
AV437210N	16-4-P
AV437211N	16-4-N
AV437212N	16-4-O
BAF5002V020A	4-2-D
BAF5002V030A	4-2-B
BAF5002V040B	4-2-C
BAF5002V040C	4-2-B
BAF5002V040F	4-2-A
BAV1246V600A	4-1-A
BAV1246V600B	4-1-H
BAV1246V600C	4-1-C
BAV1246V600D	4-1-J
BAV1246V600F	4-1-B
BAV1246V600G	4-1-I
BAV1246V600H	4-1-E
BAV1246V600J	4-1-O
BAV1246V600K	4-1-P
BAV1246V600L	4-1-F
BAV1247V600A	4-1-H
BAV1247V600B	4-1-D
BAV1247V600C	4-1-K
BAV1247V600D	4-1-Q
BAV1247V600E	4-1-M
BAV1247V600F	4-1-S
BAV1247V600G	4-1-T
BAV1247V600H	4-1-U
BAV1247V600J	4-1-V
BAV1247V600K	4-1-N
BAV1247V600L	4-1-R
BAV1247V605A	4-1-G
BAV1247V605B	4-1-L
BAV1249V600A	4-1-W
BAV1249V600B	4-1-Z
BAV1249V600C	4-1-Y
BAV1249V600D	4-1-X
BAV1249V600E	4-1-a
BAV1249V600F	4-1-d
BAV1249V600G	4-1-b
BAV1249V600H	4-1-e
BAV1249V600J	4-1-f
BAV1249V600M	4-1-c
BAV1250V600A	4-1-g
BAV1250V600B	4-1-h
BAV1250V600C	4-1-i
BAV1258V600A	4-1-j
BAV1258V600B	4-1-k
BB433174N	2-18
BD434937N	15-13-j
BD434938N	15-13-k
BD434939N	15-13-l
BD434979N	15-13-Y
BD434980N	15-13-Z
BD434982N	15-13-a
BD434984N	15-13-b
BD434985N	15-13-c
BD434986N	15-13-d
BD434987N	15-13-f
BD434988N	15-13-h
BD434989N	15-13-i
BD435049N	15-13-Q
BD435050N	15-13-R
BD435051N	15-13-O
BD435052N	15-13-U
BD435053N	15-13-S
BD435054N	15-13-F
BD435055N	15-13-E
BD435062N	15-13-P
BD435063N	15-13-T
BD435122N	15-13-A
BD435123N	15-13-B
BD435124N	15-13-I
BD435125N	15-13-D
BD435127N	15-13-C
BD435129N	15-13-J
BD435130N	15-13-K
BD435132N	15-13-M
BD435133N	15-13-L
BD435177N	15-13-V
BD435178N	15-13-W
BD435179N	15-13-X
BD435925N	15-13-e
BD436334N	15-13-m
BD436335N	15-13-n
BD436336N	15-13-o
BD436337N	15-13-p
BD436356N	15-13-q
BD436357N	15-13-r
BD436358N	15-13-s
BD436359N	15-13-t
BD436489N	15-13-H
BD436490N	15-13-G
BD436491N	15-13-N
BD436543N	15-13-g
BL433538N3	2-7
BL433561N4	2-17
BL433609N3	2-5
BL433689N	2-509
BM433176N	3-500
BM433198N	2-501
BM433593N1	3-3
BT433228N	5-T201
BVV1234D430A	2-504-A
BVV1234D430E	2-504-B
BVV1234D430F	2-504-D
BVV1234D430G	2-504-C
BVV1234D430H	2-504-B
BV387611N	5-MD1-D
BV429837N	5-MD1-G
BV429839N	5-MD1-C
BV429901N	5-MD1-F
BV433522N1	2-1
BV433534N1	2-2
BV433615N2	2-16
BV434180N	5-MD1-E
BV435423N1	5-MD1-A
BV435474N	5-MD1-B
EC412095N	10-VC1
EC416655N	5-C437
EC418759N	5-C212
EC422101N1	5-C201
EC422101N1	5-C202
EC422104N	5-C210-B
EC432918N	5-C210-A
EC435665N	5-C211
EC435729N	5-C204
EC435729N	5-C205
EC435729N	5-C206
EC435729N	5-C207
EC435729N	5-C208
EC435729N	5-C209
ED307573N	5-D3
ED307573N	5-D5
ED307573N	5-D6
ED307573N	5-D8
ED307573N	5-D9
ED307573N	5-D50
ED307573N	5-D51
ED307573N	5-D207
ED307573N	5-D218
ED307573N	5-D231
ED307573N	5-D232
ED307573N	5-D411
ED307573N	5-D413
ED307573N	5-D414
ED307573N	5-D418
ED307573N	5-D602
ED307573N	5-D603
ED307573N	5-D604
ED307573N	5-D605
ED307573N	5-D851
ED307573N	6-D500
ED307573N	6-D501
ED390011N	5-D402
ED390012N	5-D403
ED390012N	5-D404
ED394991N	5-D215-B
ED394991N	5-D216
ED401046N	5-D209
ED401046N	5-D214
ED403280N	5-D401
ED403280N	5-D415
ED403280N	5-D416
ED403280N	5-D417
ED404242N	5-D229
ED404242N	5-D230
ED416930N	10-D1
ED416930N	10-D2
ED416930N	10-D3
ED418622N	5-D201
ED418622N	5-D202
ED418622N	5-D203
ED418622N	5-D204
ED418820N	5-D412
ED422252N	5-D225
ED422519N	5-D219
ED425278N	5-D215-A
ED425442N	5-D4
ED432743N	10-D5
ED432744N	10-D6
ED433962N	5-D407
ED433962N	14-D1
ED434126N	5-D7
ED435667N	5-D211
ED435726N	5-D208
ED435727N	5-D210
ED435728N	5-D212
ED436213N	5-D205
EE435224N	5-TU1-C
EE435225N	5-TU1-A
EE435226N	5-TU1-D
EE435227N	5-TU1-B
EF393705N	5-F201
EH368948N	8-FL3-A
EH368948N	9-FL3
EH368948N	10-FL5
EH405642N	8-FL3-B
EH414623N	9-FL2
EH414623N	10-FL6
EH416618N	8-FL3-C
EH432623N	10-FL2
EH432626N	10-FL4
EH432629N	10-FL3
EH432630N	10-FL1
EH433119N	5-FL601
EH433121N	8-FL2-A
EH433121N	9-FL52
EH433121N	10-FL7
EH433122N	8-FL2-B
EH433122N	9-FL53
EH433123N	9-FL51
EH435679N	9-FL1
EH435790N	8-FL1-B
E[illegible]35792N	8-FL1-A
EI332259	11-IC501
EI332259	12-IC902
EI337530N	5-IC1
EI353750N	5-IC402
EI368809N	8-IC1
EI368809N	9-IC1
EI368829N	9-X1
EI377101	14-IC1
EI390053N	5-IC2
EI403233N	5-IC404
EI416647N	11-IC502
EI416647N	12-IC903
EI416872N	5-X761
EI422128N	5-IC201
EI422145N	5-IC407
EI422442N	5-IC405-A
EI425240N	5-X401
EI425646N	10-IC1
EI428403N	5-IC408
EI428406N	5-IC751
EI429889N	5-IC602
EI431275N	5-IC405-B
EI431323N	5-X402
EI432781N	5-IC601-A
EI432784N	5-IC601-B
EI432899N	12-IC960
EI435187N	5-IC406
EI435229N	5-IC851-B
EI435252N	5-IC697-A
EI435270N	5-IC851-A
EI435271N	5-IC761
EI435272N	5-IC697-B
EI435314N	5-IC301
EI435316N	12-IC901
EI435735N2	5-IC401-B
EI435736N2	5-IC401-A
EI435808N	5-X601-A
EI435808N	5-X602
EI435809N	5-X601-B
EI437205N	5-IC401-C
EJ416590N	5-P201
EJ428007N	6-PJ551
EJ428388N	5-P852-A
EJ431104N	5-P406
EJ433007N	5-P405
EJ433163N	5-P401
EJ433184N	5-P402
EJ433221N	5-P852-B
EJ433223N	13-P407
EJ435305N	6-P550
EJ435305N	11-P502
EJ435305N	12-P903

Part No.	Ref. No.
EJ435318N	11-PJ501
EJ435428N	12-PJ901
EJ435428N	12-PJ902
EJ435748N	6-PJ552
EM435268N	5-FL401-B
EM435269N	5-FL401-A
EO389412N	5-L602
EO389412N	5-L675
EO389412N	5-L698
EO389412N	5-L763
EO389412N	5-L851
EO389412N	11-L501
EO389412N	11-L502
EO389412N	12-L901
EO389412N	12-L902
EO389412N	12-L963
EO403270N	5-L331-B
EO403273N	8-L8-B
EO403273N	10-L15
EO408834N	9-L52
EO408956N	8-L8-A
EO408956N	9-L6
EO410256N	8-L7-B
EO410256N	10-L3
EO410256N	10-L4
EO410256N	10-L5
EO410256N	10-L7
EO410256N	10-L8
EO410256N	10-L11
EO416716N	9-L5
EO416716N	9-L51
EO422134N	5-L203
EO422134N	5-L205
EO422473N	5-L603
EO422473N	5-L671-A
EO422474N	5-L697
EO422474N	12-L964
EO422475N	5-L671-B
EO422475N	12-L968
EO422476N	5-L674
EO422477N	5-L606
EO422477N	5-L652
EO422478N	5-L610
EO422478N	5-L651
EO422479N	5-L601
EO422479N	5-L605
EO422479N	5-L761
EO422479N	12-L967
EO422481N	5-L762
EO422481N	12-L966
EO422483N	5-L654-B
EO422488N	5-L653
EO422488N	12-L965
EO425202N	12-L969
EO426410N	5-L331-A
EO427708N	8-L7-A
EO428259N	8-L1-A
EO428259N	9-L1
EO428358N	5-L654-A
EO428358N	5-L672
EO428360N	5-L673
EO432680N	8-L1-B
EO432680N	10-L2
EO432682N	5-L401
EO432682N	10-L6
EO432683N	10-L14
EO432745N	10-X1
EO433161N	5-FL330
EO433913N	5-L201
EO435243N	10-VL9
EO435244N	10-VL10
EO435245N	10-VL16
EO435416N	8-VL4
EO435416N	9-VL3
EO435417N	8-VL5
EO435417N	9-VL4
EO435419N	8-VL3-A
EO435421N	8-VL3-B
EO435421N	9-VL2
EO435730N	5-L202
ER397385N	5-FR201
ER400729N	5-FR203
ER400729N	5-FR402
ER401039J	14-FR1
ER408829N	5-FR206
ER416671N	5-R210-B
ER418648N	5-FR401
ER418648N	5-FR403
ER422189N	5-R201
ER422512N	5-R208-B
ER428204N	5-FR204
ER428386N	5-R210-A
ER428396N	5-R206
ER810145N	5-R208-A
ES414593N	5-SW403
ES414593N	5-SW404
ES414593N	13-SW405
ES414593N	13-SW406
ES414593N	13-SW407
ES414593N	13-SW408
ES414593N	13-SW409
ES433183N	5-SW401
ES433595N	3-1
ET361961N	5-TR405
ET361961N	5-TR604
ET361961N	5-TR614
ET361961N	5-TR615
ET361961N	5-TR656
ET361961N	5-TR658
ET361961N	11-TR503
ET361961N	11-TR504
ET364023N	5-TR216
ET364023N	11-TR511
ET364082N	11-TR510
ET364082N	12-TR915
ET364492N	11-TR514
ET364492N	12-TR908
ET364645N	5-TR408
ET364645N	5-TR409
ET366753N	5-TR612
ET368786N	5-TR214
ET368834N	12-TR963
ET373201N	12-TR965
ET386058N	5-TR606
ET386058N	5-TR607
ET386058N	5-TR672
ET386784N	5-TR203
ET390009N	5-TR401
ET390009N	5-TR402
ET390010N	5-TR403
ET390010N	5-TR404
ET392663N	5-TR205
ET392663N	5-TR208
ET392663N	5-TR212
ET392663N	5-TR213
ET392663N	5-TR333
ET392663N	5-TR652
ET392663N	5-TR654
ET392663N	5-TR657
ET392663N	6-TR550
ET392663N	6-TR551
ET392663N	11-TR502
ET392663N	11-TR505
ET392663N	11-TR506
ET392663N	11-TR507
ET392663N	11-TR508
ET392663N	11-TR509
ET392663N	11-TR512
ET392663N	11-TR513
ET392663N	11-TR515
ET392663N	11-TR516
ET392663N	12-TR906
ET392663N	12-TR907
ET392663N	12-TR909
ET392663N	12-TR910
ET392663N	12-TR912
ET392663N	12-TR913
ET392663N	12-TR914
ET392663N	12-TR964
ET392663N	12-TR966
ET392746N1	5-TR1
ET392746N1	5-TR3
ET392746N1	5-TR406
ET392746N1	5-TR762
ET392746N1	11-TR501
ET392746N1	12-TR904
ET392746N1	12-TR905
ET392746N1	14-TR2
ET401091J	5-TR202-A
ET414816N	5-TR4
ET415140N	5-TR204
ET416697N	5-TR211
ET416932N	5-TR7
ET416932N	5-TR9
ET416932N	5-TR11
ET416932N	5-TR51
ET416932N	8-TR2
ET416932N	9-TR2
ET416932N	9-TR4
ET416932N	10-TR10
ET416932N	10-TR14
ET416932N	12-TR903
ET416932N	12-TR917
ET416932N	12-TR921
ET416933N	5-TR6
ET416933N	5-TR10
ET416933N	5-TR52
ET416933N	5-TR55
ET416933N	9-TR3
ET416933N	9-TR51
ET416933N	9-TR52
ET416933N	10-TR9
ET416933N	10-TR16
ET416933N	12-TR911
ET419014N	5-TR331
ET422113N	5-PH201
ET422154N	5-TR210
ET427538N	5-TR201-B
ET428248N	5-TR761
ET428249N	5-TR603
ET428249N	5-TR611
ET428249N	5-TR674
ET428361N	7-PH402
ET428371N	5-TR201-A
ET428373N	5-TR207
ET428407N	5-TR202-B
ET428407N	5-TR217
ET429896N	5-TR608
ET429896N	5-TR653
ET429896N	10-TR6
ET429896N	10-TR7
ET429897N	5-TR12
ET429897N	5-TR13
ET429897N	5-TR54
ET429897N	10-TR4
ET429897N	10-TR5
ET429897N	10-TR15
ET429897N	12-TR920
ET429898N	5-TR601
ET429898N	5-TR719
ET429898N	12-TR967
ET429899N	5-TR53
ET429899N	12-TR901
ET430868N	5-TR8
ET430868N	5-TR50
ET430868N	12-TR916
ET432740N	8-TR1
ET432740N	9-TR1
ET432740N	10-TR2
ET432740N	10-TR18
ET432937N	5-TR332
ET432937N	10-TR8
ET433071N	5-TR5
ET433071N	5-TR307
ET433071N	5-TR671
ET433071N	12-TR902
ET433071N	12-TR918
ET433071N	12-TR919
ET433072N	5-TR2
ET433072N	5-TR301
ET433072N	5-TR302
ET433072N	5-TR303
ET433072N	5-TR306
ET433072N	5-TR308
ET433918N	5-TR407
ET433976N	5-TR305
ET435413N	5-PH401
EV432752N	9-VR1
EV432758N	10-VR1
EW348414N	16-1
EW425599N	15-9-B
EW427525N	16-3
EW430842N	15-9-A
EW433224N	15-12
EW433226N1	15-6
EW435334N	15-8
EW436245N	15-9-C
HE433151N	2-506
HR435698N1	2-508
HZ417681N	2-510
MB433627N	3-501
MI433579N4	3-11
MI433597N8	3-10
ML433546N1	2-13
ML433553N1	2-12
ML433560N	2-11
ML433567N1	2-15
ML433576N	3-7
ML433584N	3-12
ML433586N	3-8
ML433590N	3-5
ML433604N4	2-8
ML433628N	2-511
MT433537N1	2-6
MZ433568N	3-6
MZ433578N	3-14
MZ433589N	3-9
MZ433591N	3-4
MZ433904N	2-502
SA422907N	15-11

Part No.	Ref. No.
SC733720M1	16-5-G
SC734097N	16-5-A
SC734098N	16-5-B
SC734099N	16-6
SC734100N	16-5-C
SC734101N	16-5-D
SC734102N	16-5-E
SC734103N	16-5-F
SE434945N	15-15-Y
SE434949N	15-15-j
SE434950N	15-15-k
SE434954N	15-15-l
SE435011N	15-15-Z
SE435016N	15-15-a
SE435018N	15-15-b
SE435019N	15-15-c
SE435020N	15-15-d
SE435021N	15-15-f
SE435022N	15-15-g
SE435027N	15-15-i
SE435088N	15-15-T
SE435090N	15-15-P
SE435091N	15-15-Q
SE435095N	15-15-R
SE435096N	15-15-O
SE435097N	15-15-U
SE435098N	15-15-S
SE435157N	15-15-A
SE435158N	15-15-B
SE435159N	15-15-C
SE435160N	15-15-D
SE435162N	15-15-E
SE435163N	15-15-F
SE435164N	15-15-J
SE435165N	15-15-K
SE435167N	15-15-L
SE435168N	15-15-M
SE435827N	15-15-X
SE435828N	15-15-W
SE435829N	15-15-V
SE436120N	15-15-I
SE436121N	15-15-H
SE436122N	15-15-N
SE436416N	15-15-o
SE436418N	15-15-p
SE436449N	15-15-m
SE436451N	15-15-n
SE436496N	15-15-G
SE436541N	15-15-e
SE436542N	15-15-h
SP433763N	15-1-A
SP434917N	15-5-A
SP434918N	15-5-B
SP434919N	15-5-C
SP434920N	15-5-D
SP434921N	15-5-G
SP434922N	15-5-H
SP434924N	15-5-K
SP434925N	15-5-J
SP434926N	15-5-E
SP435814N	15-5-F
SP435953N	15-5-I
SP436153N	15-1-B
SZ428508N1	5-2
SZ433648N1	5-3
SZ433649N	5-1
VT433526N	2-3
ZG428605N	3-13
ZG429541N	15-14
ZG433557N	2-14
ZG433559N	2-9
ZG433608N3	2-10
ZS201275N	3-502
ZS323728N	15-4
ZS344754N	2-507
ZS376521N	15-7
ZS389950N	3-2
ZS393515N	15-2
ZS403887N	2-505
ZS417161N	2-500
ZS418616J	2-4
ZS426416N	15-3
ZS426424N	15-10
ZS479474N	2-503

MEMO

ABBREVIATIONS (VIDEO)

ABBREVIATION	EXPLANATION	ABBREVIATION	EXPLANATION
A	Audio orAnalogue	MOD	MODulator
AC	Alternating Current	MRS	Motor ReverSe
ACC	Automatic Color Control	NAP	NtscAmusement Pal
A/C	Audio and Control	NG	Noise Gate
ADJ	ADJust (ment)	NICAM	Near Instanteneous CompandAudio Multiplex
AFC	Automatic Frequency Control		
AFT	Automatic FineTuning	NON-LIN	NON-LINear
AGC	Automatic Gain Control	N.T.S.C.	NationalTelevision System Committee
AH	Audio Head	OSC	OSCillator
AL	ALways (voltage)	PAL	Phase Alternation by Line
ALC	Automatic Level Control	PB	Play Back
A-SW.P	Audio SWitching Pulse	PCB (P.C.B)	Printed Circuit Board
A-MUTE	Audio MUTE	P-COM	Phase-COMparator
ANT	ANTenna	P DOWN	Power DOWN
APC	Automatic Phase Control	PG	Pulse Generator
ASSY	ASSemblY	P.I.P	Picture In Picture
BAL	BALance	PL, PLG	PLunger (PLunGer)
B DOWN	Break DOWN	PRG (PGM)	PRoGram (ProGraM)
BGP	Burst Gate Pulse	PU	Pick UP (head, pulse)
BLK	BLocK or BLacK	PWR	PoWeR
BOP	Blank Output Pulse	Q	Quality factor
BPF	Band Pass Filter	R	Right
BU	Back Up (voltage)	RAM	RandomAccess Memory
B/W	Black and White	REC	RECord
C	Chroma or Color	REF	REFerence
CCD	Charge Coupled Device	REF-V	REFerence Vertical signal
CCIR	Comit Consultatif International des Radio communications	REG	REGulator
		REV (REVW)	REView (REVieW)
CH (ch)	CHannel (channel)	REW	REWind
CLK	CLocK	RF	Radio Frequency
CM	Capstan Motor	ROM	Read Only Memory
CN	CoNnector	R.S SW	Record-Safety SWitch
COMP	COMParator	RST (RES)	ReSet (RESet)
CSW	Cassette SWitch	RVS	ReVerSe
CSYNC	Composite SYNC	S	Sensor, Shield
CTL	ConTrol	SAW	SurfaceAcoustic Wave
CUE	CUE	SC	SimulCast
DAC	Digital toAnalog Converter	S CLK	Serial CLocK
DC	Direct Current	SECAM	SÉquentiel Couleur À Mémoire
DEMOD	DEMODulator	S & H	Sample and Hold
DET	DETetct (DETector)	SLP	Super Long Play
DL	Delay Line	SP	Standard Play
DM	Drum Motor	SPD	SPeeD
DOC	Drop Out Compensator	SRP	Supply Reel Pulse
D.P.E	Drum Phase Error	SRV	SeRVo
D.PG	Drum Pulse Generator	SOW	Sync On Word
EE	Electronic to Electronic	STBY	STandBY
EF	Emitter Follower	S.VHS	Super VHS
EMPHA	EMPHAsis	SW	SWitch
ENV	ENVelope	SW'NG	SWitchiNG
EP	Extended Play	SWP	SWitching Pulse
EP ROM	Erasable Programmable ROM	SYNC	SYNChronize
EQ	EQualizer	T-AUDIO	TunerAUDIO
FE	Full track Erase	TPZ (TRAPE)	TraPeZoid (TRAPEzoid)
FF	Flip-Flop or Fast Foward	TRK	TRacKing
FG	Frequency Generator	TRP	Take up Reel Pulse
Fig	Figure	T/U	Take Up
FLD	FLuorescent Display	TV	TeleVision
FM	Frequency Modulation	UHF	Ultra High Frequency
Fo	resonance Frequency	UNR	UNRegulated (voltage)
FREQ	FREQuency	V	Vertical or Video
GND	GrouND	VASS	VideoAddress Search System
H	Horizontal	VCO	Voltage Controlled Oscillator
HP	Horizontal (sync) pulse	VH	Video Head
HPF	High Pass Filter	VHF	Very High Frequency
HQ	High Quality System	VHS	Video Home System
IC	Integrated Circuit	VIF	Video Intermediate Frequency
ID	IDentification	VISS	Video Index Search System
IDL	IDLe (Voltage)	VJ	Video Judge
IMS	Interactive Monitor System	VM	Voltage for Memory
INS	INSert	VOB	Video On Blank
INV	INVerter	VOW	Video On Word
L	Left	VP	Vertical (sync) Pulse
LED	Light Emitting Diode	VPS	Video Program System
LIM	LIMitter	VPT	Video Programming by video Text
LM	Loading Motor	VT	Voltage forTuning
LM STP	Loading Motor STop	WHT	WHiTe
LP	Long Play	Y	Luminance
LPF	Low Pass Filter	2H	2 Hour (SP)
ME-SECAM	Middle East SECAM	4H	4 Hour (LP)
MI-COM	MIcro COMputer	6H	6 Hour (SLP/EP)
MM	Mono-stayble Multi		

AKAI

MODEL VS-G260 SERIES
MODEL VS-G270 SERIES
MODEL VS-G460 SERIES
MODEL VS-G470 SERIES

SCHEMATIC DIAGRAMS AND PC BOARDS

TABLE OF CONTENTS

I. BLOCK DIAGRAMS

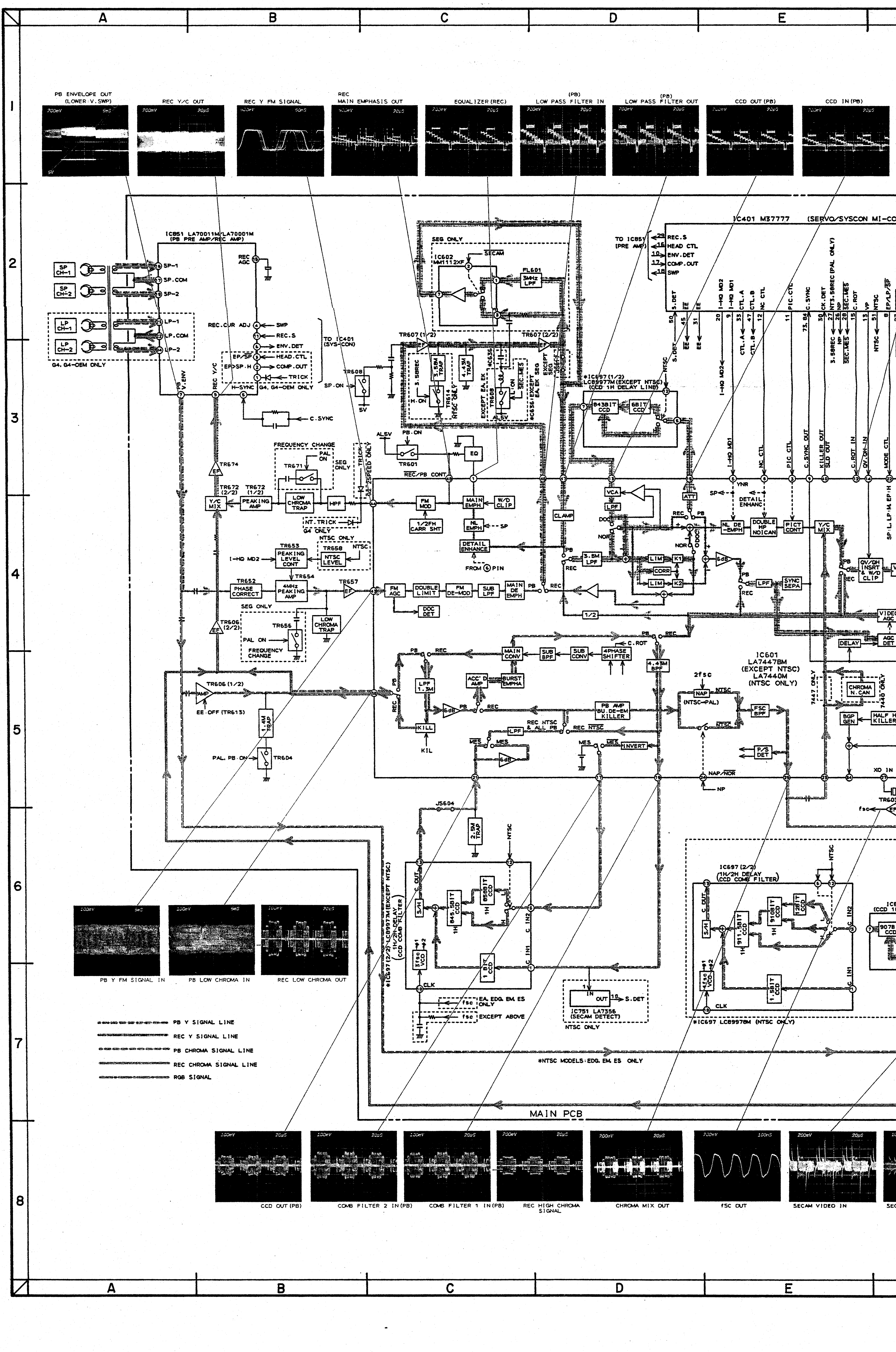
1. VIDEO 3
2. AUDIO 4
3. SERVO 5
4. OPERATION & SYSCON 6

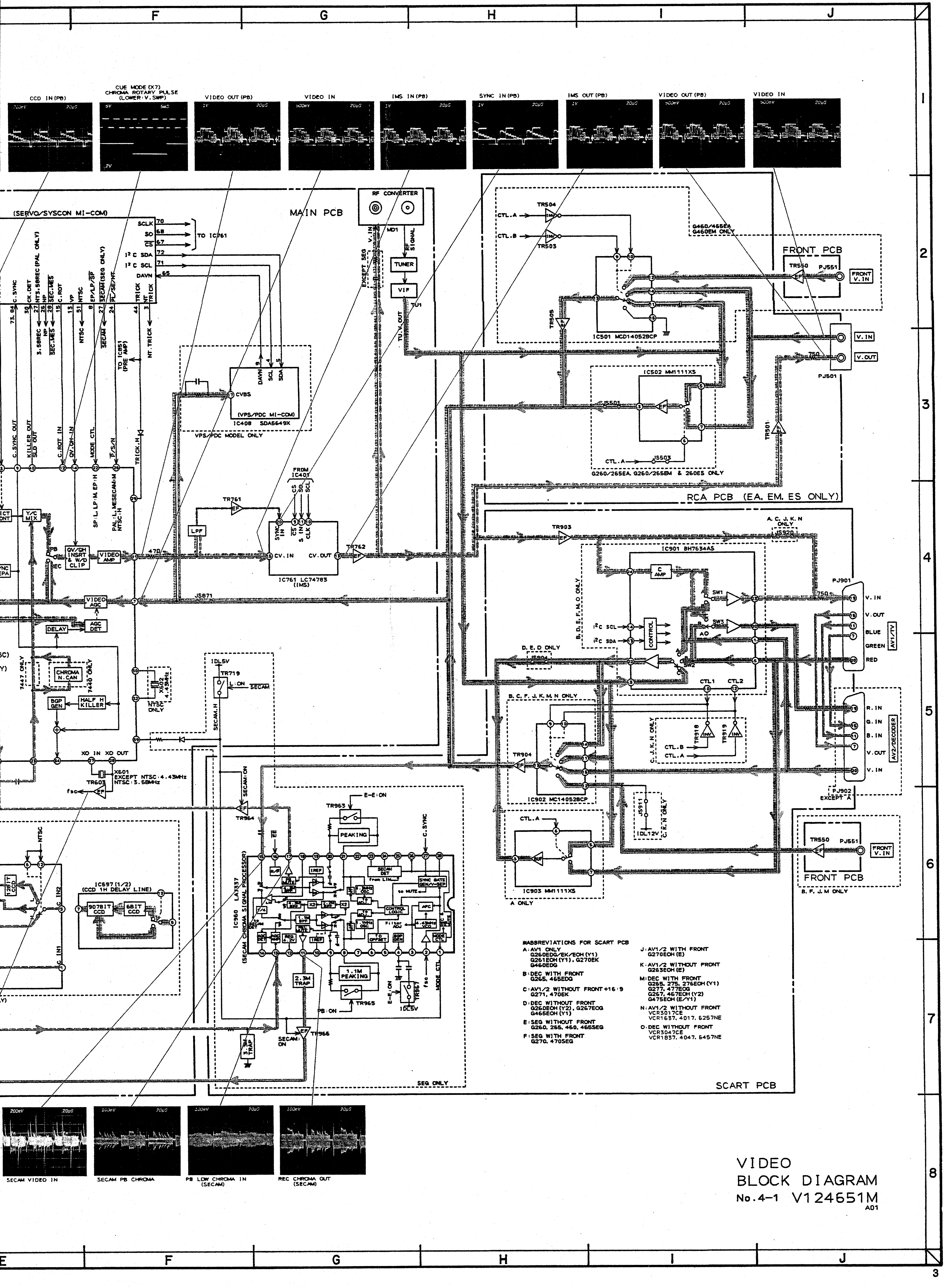
II. SCHEMATIC DIAGRAMS AND PC BOARDS

1. CONNECTION DIAGRAM 7
2. MAIN1/4 (POWER BLK) 8
3. MAIN2/4 (RF, AUDIO BLK) 9
4. MAIN3/4 (SERVO/SYS-CON BLK) 10
5. MAIN4/4 (VIDEO/PRE AMP BLK) 12
6. SCART (EXCEPT EA/EM/ES) 14
7. RCA (EA/EM/ES ONLY) 16
8. VIF-SEG (VS-G260,G265,G270,G460,G465,G470SEG) 18
9. VIF-EDG (VS-G260,G265,G460,G465 EDG) 20
10. VIF-NORMAL (EXCEPT EDG/SEG) 22

III. INFORMATION OF ICs & FLDs 24

Use these schematic diagrams and PC boards together with the provided service manual.


A
B
C
D
E
1
2
3
4
5
6
7
8
PB ENVELOPE OUT (LOWER V.SWP)
REC Y/C OUT
REC Y FM SIGNAL
REC MAIN EMPHASIS OUT
EQUALIZER (REC)
(PB) LOW PASS FILTER IN
(PB) LOW PASS FILTER OUT
CCD OUT (PB)
CCD IN (PB)
IC851 LA70011M/LA70001M (PB PRE AMP/REC AMP)
SP CH-1
SP CH-2
LP CH-1
LP CH-2
G4, G4-OEM ONLY
REC AGC
REC.CUR ADJ
SWP
REC.S
ENV.DET
HEAD.CTL
COMP.OUT
TRICK
TO IC401 (SYS-CON)
C.SYNC
IC602 MM1112XF
SEG ONLY
SECAM
FL601 3MHz LPF
TR607 (1/2)
TR607 (2/2)
TR608
TR614
TR601
TR674
TR672
TR671
FREQUENCY CHANGE
PAL ON
SEG ONLY
Y/C MIX
PEAKING AMP
LOW CHROMA TRAP
HPF
FM MOD
1/2FH CARR SHT
MAIN EMPH
W/D CLIP
NL EMPH
DETAIL ENHANCE
FROM ⑥ PIN
TR653 PEAKING LEVEL CONT
TR658 NTSC LEVEL
NTSC ONLY
I-HQ MD2
TR652 PHASE CORRECT
TR654 4MHz PEAKING AMP
TR657
FM AGC
DOUBLE LIMIT
FM DE-MOD
SUB LPF
MAIN DE EMPH
DOC DET
TR606 (2/2)
TR656
LOW CHROMA TRAP
TR606 (1/2)
EE.OFF (TR613)
1.4M TRAP
PAL.PB.ON
TR604
*IC697 (1/2) LC89977M (EXCEPT NTSC) (CCD 1H DELAY LINE)
843BIT CCD
6BIT CCD
CLAMP
VCA
LPF
ATT
3.5M LPF
LIM
CORR
K1
K2
6dB
NL DE-EMPH
DOUBLE HP NOICAN
PICT CONT
Y/C MIX
SYNC SEPA
DETAIL ENHANC
QV/QH INSRT & W/D CLIP
VIDEO AGC
AGC DET
DELAY
IC401 M37777 (SERVO/SYSCON MI-CO
TO IC851 (PRE AMP)
S.DET
EE
I-HQ MD2
I-HQ MD1
CTL.A
CTL.B
NC CTL
PIC.CTL
C.SYNC
CK.DET
NT3.58REC (PAL ONLY)
NP
SEC.MES
C.ROT
VP
NTSC
EP/LP/SP
KILLER OUT
SLD OUT
MODE CTL
SP:L, LP:M, EP:H
MAIN CONV
SUB BPF
SUB CONV
4PHASE SHIFTER
4.43M BPF
LPF 1.3M
ACC'D AMP
BURST EMPHA
KILL
KIL
PB AMP BU.DE-EM KILLER
INVERT
IC601 LA7447BM (EXCEPT NTSC) LA7440M (NTSC ONLY)
2fsc
NAP (NTSC→PAL)
FSC BPF
P/S DET
NAP/NOR
7447 ONLY
7440 ONLY
CHROMA N.CAN
BGP GEN
HALF H KILLER
XO IN
JS604
2.5M TRAP
*IC697 (2/2) LC89977M (EXCEPT NTSC) (1H/2H DELAY) (CCD COMB FILTER)
845.5BIT CCD
858BIT CCD
1 BIT CCD
3fsc VCO
S/H
C OUT
C IN1
C IN2
CLK
EA, EDG, EM, ES ONLY
EXCEPT ABOVE
IC751 LA7556 (SECAM DETECT)
NTSC ONLY
IC697 (2/2) (1H/2H DELAY (CCD COMB FILTER)
911.5BIT CCD
910BIT CCD
128IT CCD
1.5BIT CCD
4fsc VCO
*IC697 LC89978M (NTSC ONLY)
*NTSC MODELS: EDG, EM, ES ONLY
PB Y SIGNAL LINE
REC Y SIGNAL LINE
PB CHROMA SIGNAL LINE
REC CHROMA SIGNAL LINE
RGB SIGNAL
PB Y FM SIGNAL IN
PB LOW CHROMA IN
REC LOW CHROMA OUT
MAIN PCB
CCD OUT (PB)
COMB FILTER 2 IN (PB)
COMB FILTER 1 IN (PB)
REC HIGH CHROMA SIGNAL
CHROMA MIX OUT
fSC OUT
SECAM VIDEO IN



F
G
H
I
J
1
2
3
4
5
6
7
8
CCD IN (PB)
CUE MODE (X7) CHROMA ROTARY PULSE (LOWER: V.SWP)
VIDEO OUT (PB)
VIDEO IN
IMS IN (PB)
SYNC IN (PB)
IMS OUT (PB)
VIDEO OUT (PB)
VIDEO IN
SECAM VIDEO IN
SECAM PB CHROMA
PB LOW CHROMA IN (SECAM)
REC CHROMA OUT (SECAM)
(SERVO/SYSCON MI-COM)
MAIN PCB
RF CONVERTER
TUNER
VIF
RF SIGNAL
MD1
TU1
TU.V.OUT
EXCEPT SEG
V.IN
SCLK
SO
CS
I²C SDA
I²C SCL
DAVN
TO IC761
C.SYNC
CK.DET
NT3.58REC (PAL ONLY)
NP
SEC.MES
C.ROT
VP
NTSC
EP/LP/SP
SECAM (SEG ONLY)
PL/SE/NT
TRICK
NT TRICK
C.SYNC OUT
KILLER OUT
SLD OUT
C.ROT IN
QV.QH IN
MODE CTL
P/S/N
3.58REC
SEC.MES
SECAM
SP:L LP:M EP:H
PAL:L MESECAM:M NTSC:H
TO IC851 (PRE AMP)
TRICK.H
NT.TRICK
IC408 SDA5649X
(VPS/PDC MI-COM)
CVBS
VPS/PDC MODEL ONLY
IC761 LC74783 (IMS)
CV.IN
CV.OUT
SYNC IN
S IN
CLK
FROM IC401
LPF
TR761
TR762
JS871
Y/C MIX
QV/QH INSRT & W/D CLIP
VIDEO AMP
VIDEO AGC
AGC DET
DELAY
CHROMA N.CAN
7447 ONLY
7440 ONLY
BGP GEN
HALF H KILLER
X602 4.43MHz
NTSC ONLY
X601 EXCEPT NTSC: 4.43MHz NTSC: 3.58MHz
XO IN
XO OUT
TR603
fsc
IC697 (1/2) (CCD 1H DELAY LINE)
907BIT CCD
6BIT CCD
128IT CCD
C.IN1
C.IN2
IDL5V
TR719
L:ON SECAM
SECAM.H
SECAM:ON
TR964
IC960 LA7337 (SECAM CHROMA SIGNAL PROCESSOR)
PEAKING
TR963
E-E:ON
1.1M PEAKING
TR965
PB:ON
2.3M TRAP
3.3M TRAP
TR966
TR967
SECAM: ON
SEG ONLY
C.SYNC
MODE CTL
SCART PCB
RCA PCB (EA, EM, ES ONLY)
TR504
TR503
TR505
CTL.A
CTL.B
IC501 MCD14052BCP
IC502 MM1111XS
JS501
JS503
TR501
G460/465EA G460EM ONLY
G260/265EA, G260/265EM & 260ES ONLY
FRONT PCB
TR550
PJ551
FRONT V.IN
PJ501
V.IN
V.OUT
750
TR903
A, C, J, K, N ONLY
JS920
IC901 BH7634AS
C AMP
CONTROL
SW1
SW2
SW3
AO
CTL1
CTL2
B, D, E, F, M, O ONLY
D, E, O ONLY
JS904
B, C, F, J, K, M, N ONLY
TR904
IC902 MC14052BCP
C, J, K, N ONLY
TR918
TR919
JS911
IDL12V
C, K, N ONLY
IC903 MM1111XS
A ONLY
BUF
PJ901
V.IN
V.OUT
BLUE
GREEN
RED
AV1/TV
PJ902
EXCEPT A
R.IN
G.IN
B.IN
V.OUT
V.IN
AV2/DECODER
B, F, J, M ONLY

*ABBREVIATIONS FOR SCART PCB

A: AV1 ONLY
G260EDG/EK/EOH (Y1)
G261EOH (Y1), G270EK
G460EDG

B: DEC WITH FRONT
G265, 465EDG

C: AV1/2 WITHOUT FRONT +16:9
G271, 470EK

D: DEC WITHOUT FRONT
G260EOH (Y2), G267EOG
G465EOH (Y1)

E: SEG WITHOUT FRONT
G260, 265, 460, 465SEG

F: SEG WITH FRONT
G270, 470SEG

J: AV1/2 WITH FRONT
G270EOH (E)

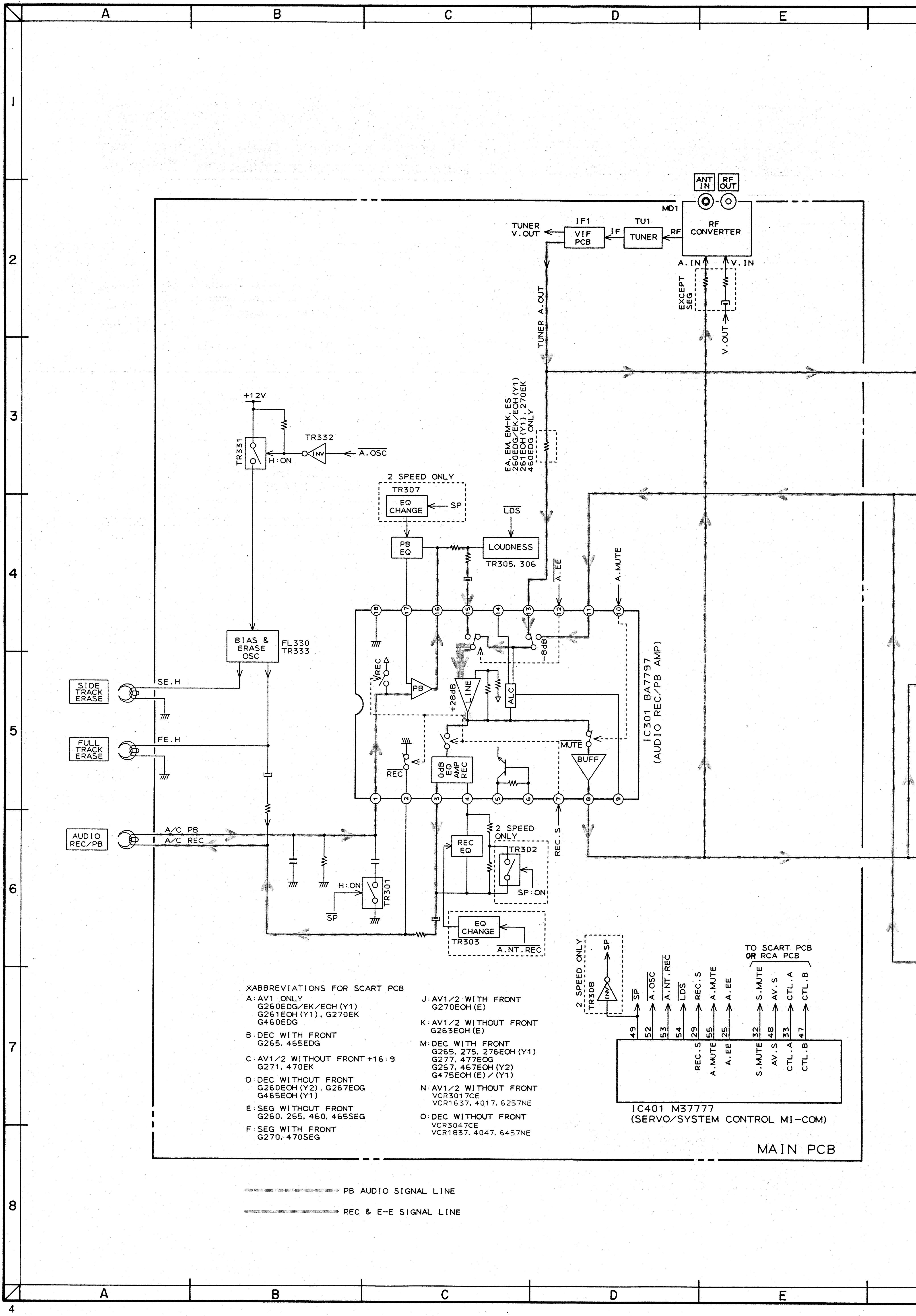
K: AV1/2 WITHOUT FRONT
G263EOH (E)

M: DEC WITH FRONT
G265, 275, 276EOH (Y1)
G277, 477EOG
G267, 467EOH (Y2)
G475EOH (E/Y1)

N: AV1/2 WITHOUT FRONT
VCR3017CE
VCR1637, 4017, 6257NE

O: DEC WITHOUT FRONT
VCR3047CE
VCR1837, 4047, 6457NE

VIDEO
BLOCK DIAGRAM
No.4-1 V124651M
A01


A
B
C
D
E
1
2
3
4
5
6
7
8
ANT IN
RF OUT
MD1
RF CONVERTER
TU1
TUNER
RF
IF
IF1
VIF PCB
TUNER V.OUT
A.IN
V.IN
EXCEPT SEG
V.OUT
TUNER A.OUT
EA, EM, EM-K, ES
260EDG/EK/EOH (Y1)
261EOH (Y1), 270EK
460EDG ONLY
+12V
TR331
H:ON
TR332
INV
A.OSC
2 SPEED ONLY
TR307
EQ CHANGE
SP
PB EQ
LDS
LOUDNESS
TR305, 306
A.EE
A.MUTE
BIAS & ERASE OSC
FL330
TR333
SIDE TRACK ERASE
SE.H
FULL TRACK ERASE
FE.H
AUDIO REC/PB
A/C PB
A/C REC
REC
PB
+28dB
LINE
ALC
-8dB
MUTE
BUFF
0dB EQ AMP REC
IC301 BA7797
(AUDIO REC/PB AMP)
REC.S
REC EQ
2 SPEED ONLY
TR302
SP:ON
H:ON
TR301
SP
EQ CHANGE
TR303
A.NT.REC
2 SPEED ONLY
TR308
INV
SP
49 SP
52 A.OSC
53 A.NT.REC
54 LDS
29 REC.S REC.S
55 A.MUTE A.MUTE
25 A.EE A.EE
32 S.MUTE S.MUTE
48 AV.S AV.S
33 CTL.A CTL.A
47 CTL.B CTL.B
TO SCART PCB OR RCA PCB
IC401 M37777
(SERVO/SYSTEM CONTROL MI-COM)
MAIN PCB

※ABBREVIATIONS FOR SCART PCB

A: AV1 ONLY
G260EDG/EK/EOH (Y1)
G261EOH (Y1), G270EK
G460EDG

B: DEC WITH FRONT
G265, 465EDG

C: AV1/2 WITHOUT FRONT +16:9
G271, 470EK

D: DEC WITHOUT FRONT
G260EOH (Y2), G267EOG
G465EOH (Y1)

E: SEG WITHOUT FRONT
G260, 265, 460, 465SEG

F: SEG WITH FRONT
G270, 470SEG

J: AV1/2 WITH FRONT
G270EOH (E)

K: AV1/2 WITHOUT FRONT
G263EOH (E)

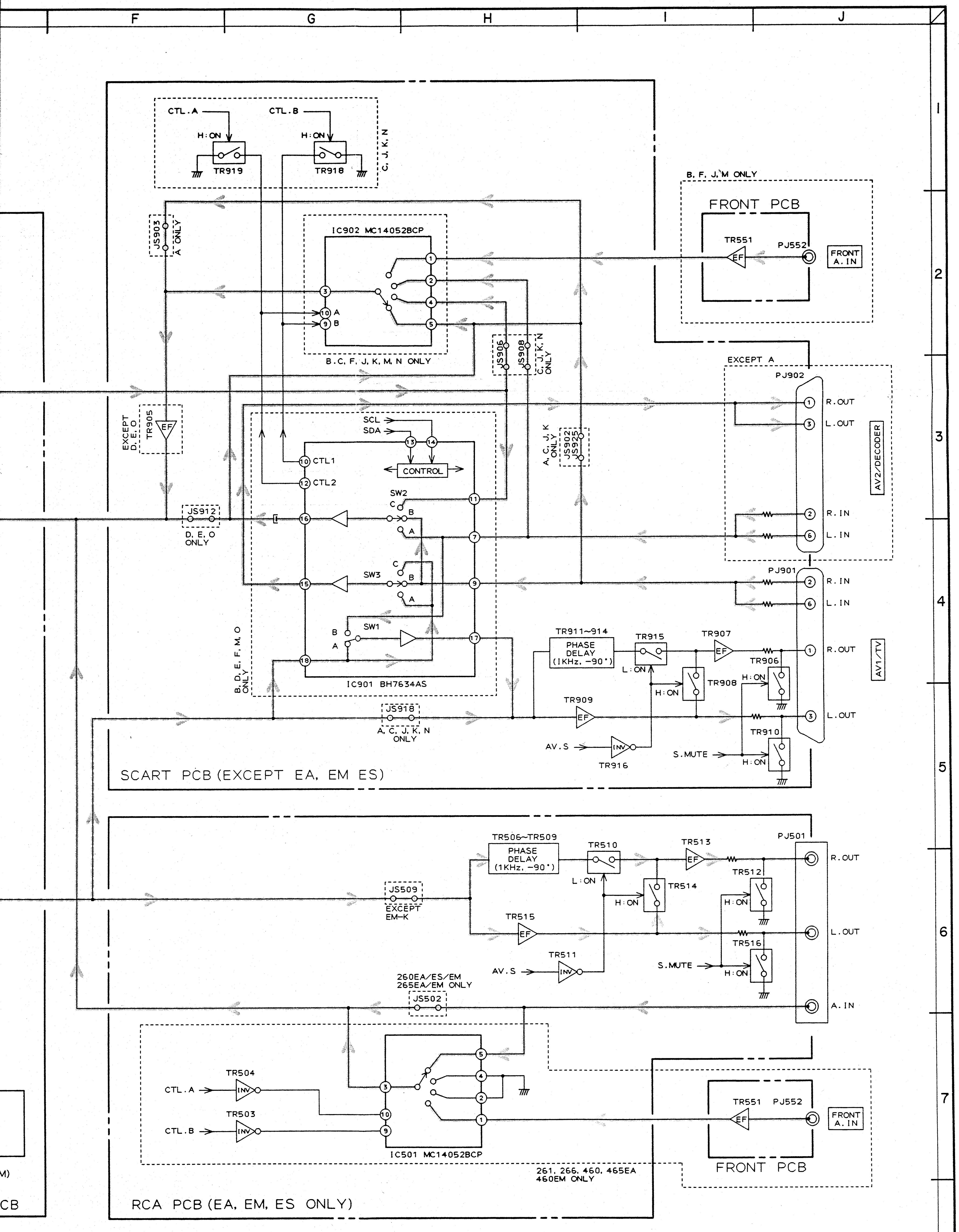
M: DEC WITH FRONT
G265, 275, 276EOH (Y1)
G277, 477EOG
G267, 467EOH (Y2)
G475EOH (E)/(Y1)

N: AV1/2 WITHOUT FRONT
VCR3017CE
VCR1637, 4017, 6257NE

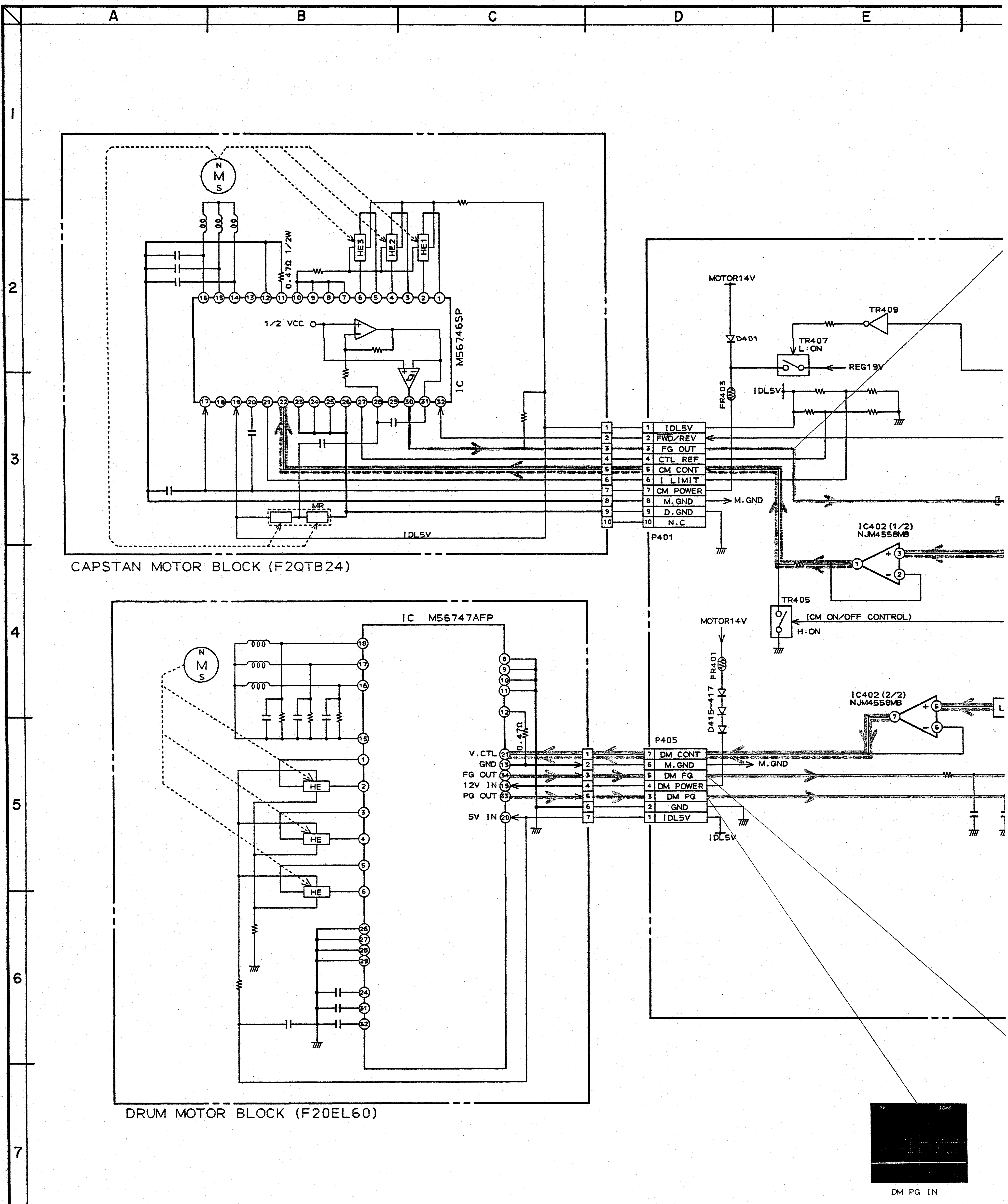
O: DEC WITHOUT FRONT
VCR3047CE
VCR1837, 4047, 6457NE

PB AUDIO SIGNAL LINE

REC & E-E SIGNAL LINE

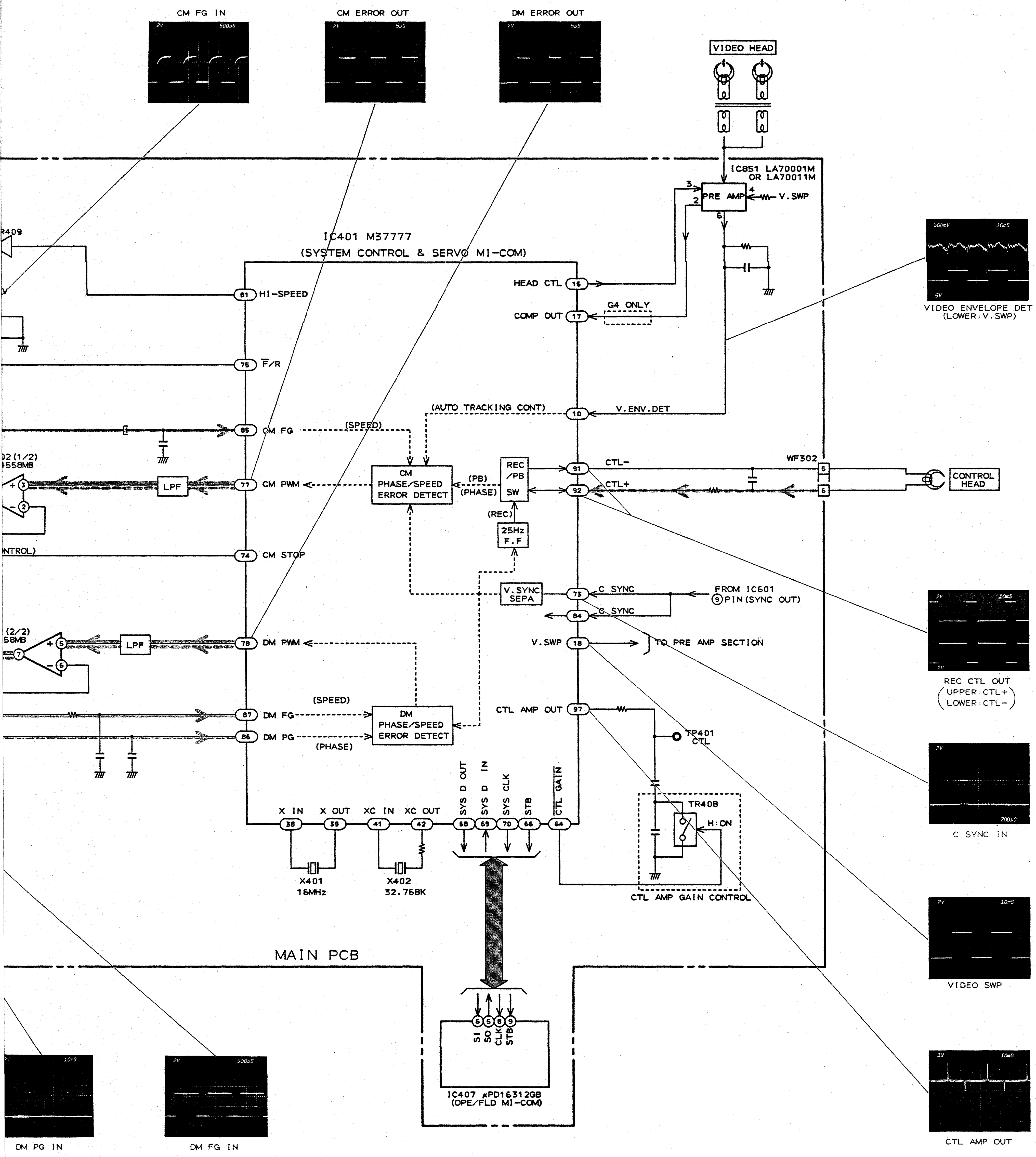

F
G
H
I
J
1
2
3
4
5
6
7
8
CTL.A
CTL.B
H:ON
TR919
TR918
C, J, K, N
JS903
A ONLY
IC902 MC14052BCP
10 A
9 B
B.C, F, J, K, M, N ONLY
JS906
JS908
C, J, K, N ONLY
B, F, J, M ONLY
FRONT PCB
TR551
PJ552
FRONT A.IN
EF
EXCEPT A
PJ902
R.OUT
L.OUT
R.IN
L.IN
AV2/DECODER
EXCEPT D, E, O
TR905
A, C, J, K ONLY
JS902
JS925
SCL
SDA
CTL1
CTL2
CONTROL
SW2
SW3
SW1
JS912
D, E, O ONLY
B, D, E, F, M, O ONLY
IC901 BH7634AS
PJ901
TR911~914
PHASE DELAY (1KHz, -90°)
TR915
TR907
TR906
L:ON
TR908
TR909
JS918
A, C, J, K, N ONLY
AV.S
INV
TR916
S.MUTE
TR910
AV1/TV
SCART PCB (EXCEPT EA, EM ES)
TR506~TR509
TR510
TR513
PJ501
TR514
TR512
JS509
EXCEPT EM-K
TR515
TR516
TR511
A.IN
260EA/ES/EM 265EA/EM ONLY
JS502
TR504
TR503
IC501 MC14052BCP
261, 266, 460, 465EA 460EM ONLY
RCA PCB (EA, EM, ES ONLY)
M)
CB

AUDIO
BLOCK DIAGRAM
No.4-2 V124652M
A01



A
B
C
D
E
1
2
3
4
5
6
7
8
CAPSTAN MOTOR BLOCK (F2QTB24)
M
N
S
HE3
HE2
HE1
0.47Ω 1/2W
1/2 VCC
IC M56746SP
MR
IDL5V
1 IDL5V
2 FWD/REV
3 FG OUT
4 CTL REF
5 CM CONT
6 I LIMIT
7 CM POWER
8 M.GND
9 D.GND
10 N.C
P401
M.GND
MOTOR14V
D401
FR403
TR409
TR407
L:ON
REG19V
IDL5V
IC402 (1/2)
NJM4558MB
TR405
(CM ON/OFF CONTROL)
H:ON
DRUM MOTOR BLOCK (F20EL60)
IC M56747AFP
HE
HE
HE
0.47Ω
V.CTL
GND
FG OUT
12V IN
PG OUT
5V IN
MOTOR14V
FR401
D415~417
IC402 (2/2)
NJM4558MB
P405
7 DM CONT
6 M.GND
5 DM FG
4 DM POWER
3 DM PG
2 GND
1 IDL5V
M.GND
IDL5V
2V
10mS
DM PG IN

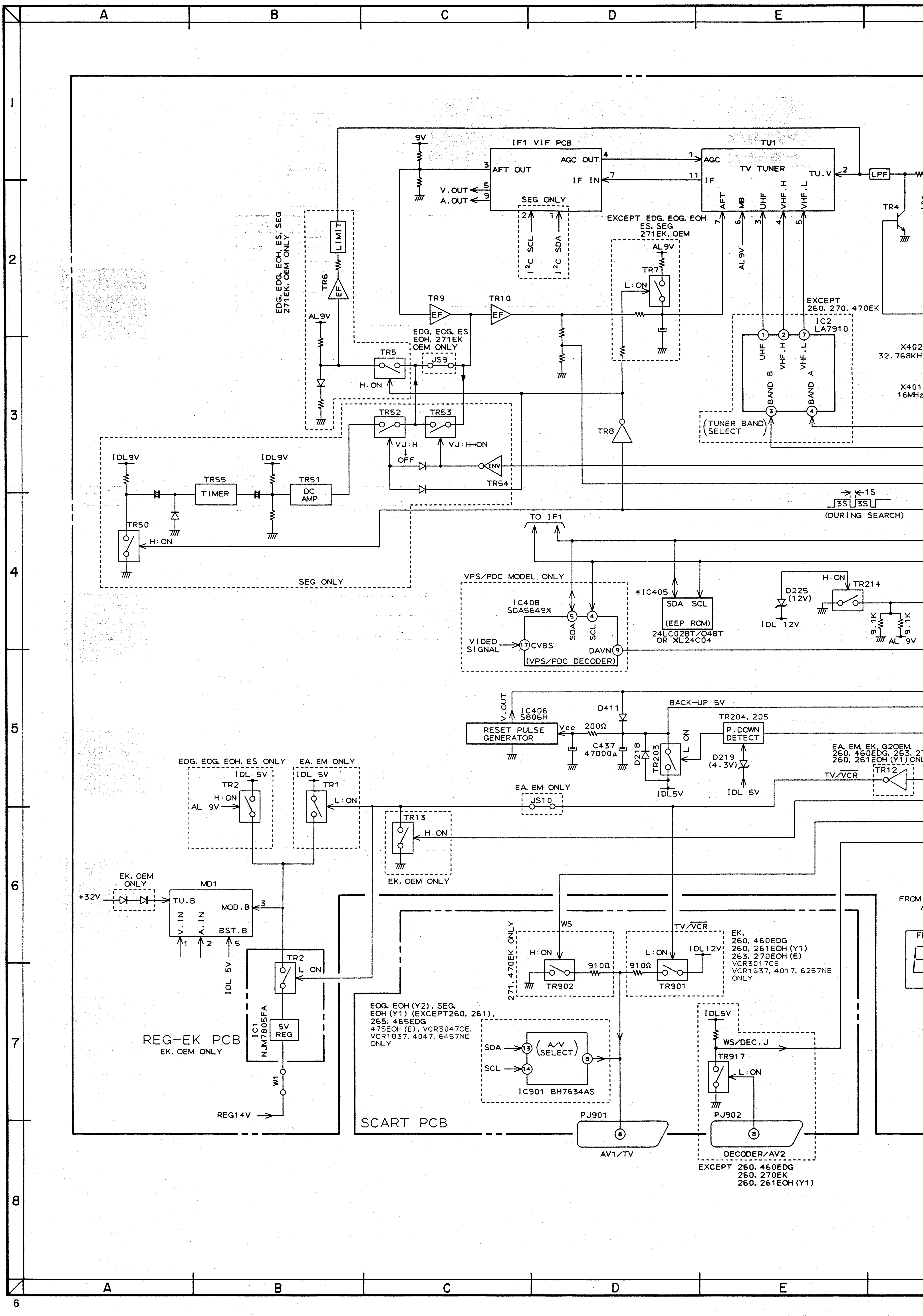
NOTE: PHOTOGRAPHS EXCEPT [REC CTL OUT]
WERE TAKEN DURING PB MODE.
EXCEPT [REC CTL OUT, ENVELOPE DET]
PHOTOGRAPH'S SECOND LINE FROM THE
BOTTOM IS DC 0V.



CM FG IN
CM ERROR OUT
DM ERROR OUT
VIDEO HEAD
IC851 LA70001M OR LA70011M
PRE AMP
V.SWP
IC401 M37777
(SYSTEM CONTROL & SERVO MI-COM)
HI-SPEED
F/R
CM FG
CM PWM
CM STOP
DM PWM
DM FG
DM PG
HEAD CTL
COMP OUT
G4 ONLY
(AUTO TRACKING CONT)
V.ENV.DET
(SPEED)
(PHASE)
(PB)
(REC)
CM PHASE/SPEED ERROR DETECT
DM PHASE/SPEED ERROR DETECT
REC /PB SW
25Hz F.F
V.SYNC SEPA
CTL-
CTL+
WF302
CONTROL HEAD
C SYNC
FROM IC601 ⑨PIN (SYNC OUT)
TO PRE AMP SECTION
CTL AMP OUT
TP401 CTL
TR408
H:ON
CTL AMP GAIN CONTROL
X IN
X OUT
XC IN
XC OUT
SYS D OUT
SYS D IN
SYS CLK
STB
CTL GAIN
X401 16MHz
X402 32.768K
MAIN PCB
SI
SO
CLK
STB
IC407 µPD16312GB (OPE/FLD MI-COM)
LPF
R409
02(1/2) 4558MB
(2/2) 58MB
NTROL)
VIDEO ENVELOPE DET (LOWER: V.SWP)
REC CTL OUT (UPPER: CTL+ LOWER: CTL-)
C SYNC IN
VIDEO SWP
CTL AMP OUT
DM PG IN
DM FG IN
F
G
H
I
J
1
2
3
4
5
6
7
8

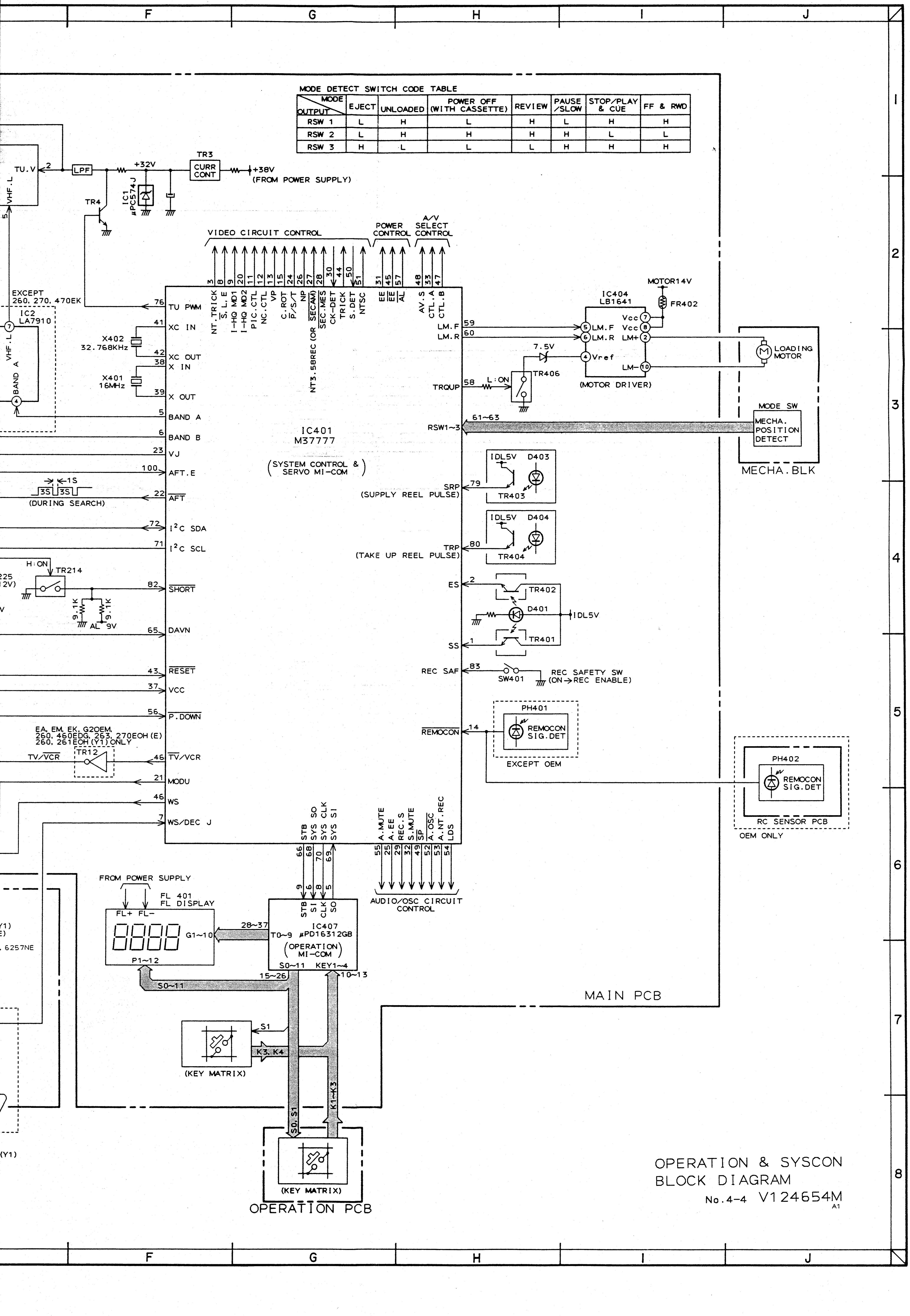
:CAPSTAN MOTOR SPEED CONTROL LINE
:CAPSTAN MOTOR PHASE CONTROL LINE
:DRUM MOTOR SPEED CONTROL LINE
:DRUM MOTOR PHASE CONTROL LINE

SERVO
BLOCK DIAGRAM
No.4-3 V124653M
A1

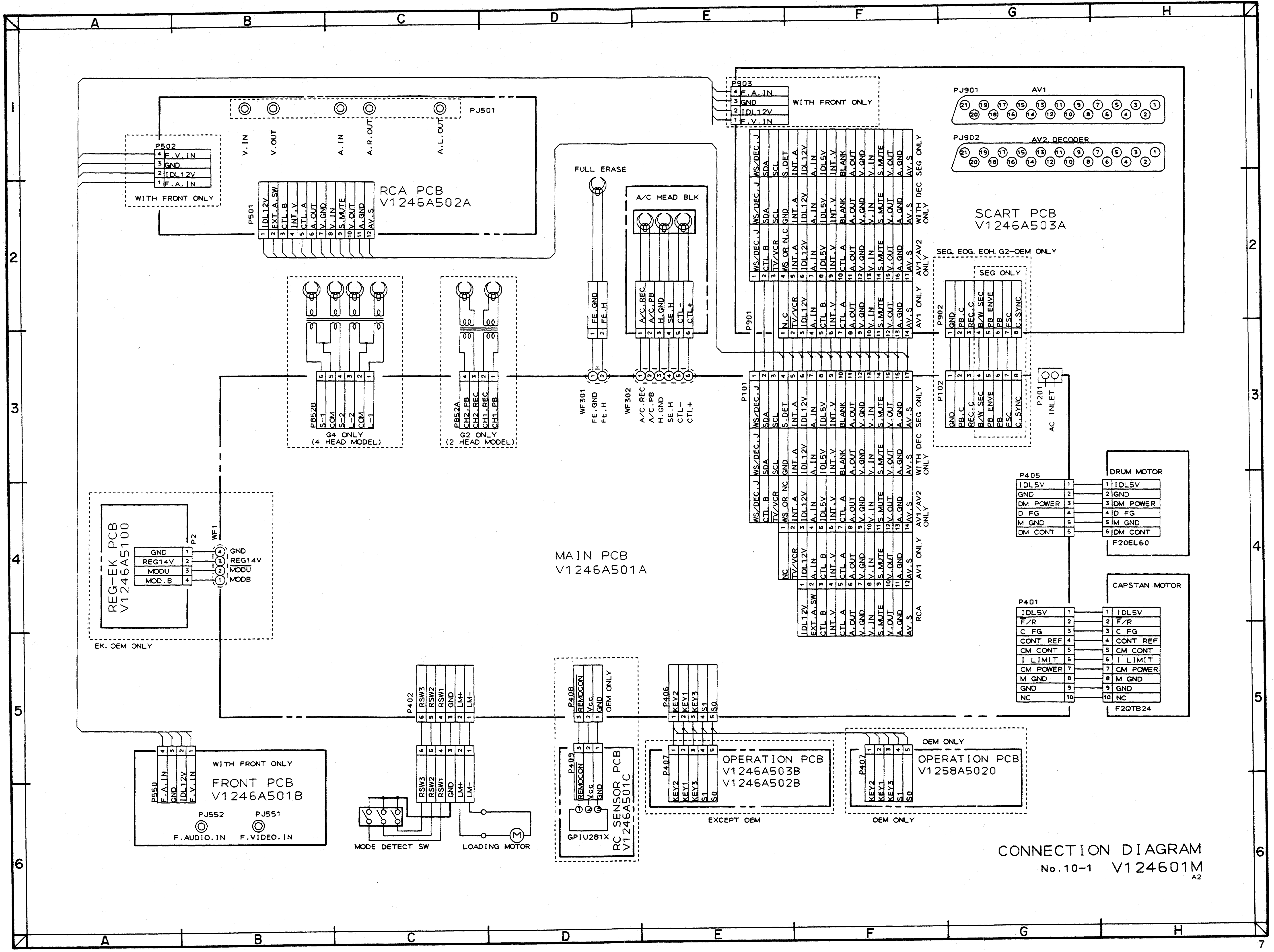

A
B
C
D
E
1
2
3
4
5
6
7
8
IF1 VIF PCB
AGC OUT
AFT OUT
IF IN
V.OUT
A.OUT
SEG ONLY
I²C SCL
I²C SDA
9V
TU1
TV TUNER
AGC
IF
TU.V
LPF
TR4
AFT
MB
UHF
VHF.H
VHF.L
AL9V
EXCEPT EDG, EOG, EOH ES, SEG 271EK, OEM
TR7
L:ON
EDG, EOG, EOH, ES, SEG 271EK, OEM ONLY
LIMIT
TR6
EF
TR9
TR10
EDG, EOG, ES EOH, 271EK OEM ONLY
JS9
TR5
H:ON
EXCEPT 260, 270, 470EK
IC2 LA7910
BAND B
BAND A
(TUNER BAND SELECT)
X402 32.768KHz
X401 16MHz
TR52
TR53
VJ:H ↓ OFF
VJ:H→ON
INV
TR54
TR8
IDL9V
TR55
TIMER
TR51
DC AMP
TR50
SEG ONLY
1S
3S 3S
(DURING SEARCH)
TO IF1
VPS/PDC MODEL ONLY
IC408 SDA5649X
VIDEO SIGNAL
CVBS
SDA
SCL
DAVN
(VPS/PDC DECODER)
*IC405
(EEP ROM)
24LC02BT/04BT OR XL24C04
D225 (12V)
IDL 12V
TR214
9.1K
AL 9V
IC406 S806H
V.OUT
RESET PULSE GENERATOR
Vcc
200Ω
C437 47000μ
D411
D218
TR203
BACK-UP 5V
TR204, 205
P.DOWN DETECT
D219 (4.3V)
IDL 5V
IDL5V
EA, EM, EK, G20EM, 260, 460EDG, 263, 2 260, 261EOH (Y1) ONL
TR12
TV/VCR
EDG, EOG, EOH, ES ONLY
EA, EM ONLY
IDL 5V
TR2
AL 9V
TR1
EA, EM ONLY
JS10
TR13
EK, OEM ONLY
EK, OEM ONLY
+32V
MD1
TU.B
MOD.B
V.IN
A.IN
BST.B
IDL 5V
IC1 NJM7805FA
5V REG
W1
REG14V
REG-EK PCB
EK, OEM ONLY
FROM
WS
271, 470EK ONLY
TR902
910Ω
TR901
IDL12V
EK, 260, 460EDG 260, 261EOH (Y1) 263, 270EOH (E) VCR3017CE VCR1637, 4017, 6257NE ONLY
EOG, EOH (Y2), SEG, EOH (Y1) (EXCEPT260, 261), 265, 465EDG 475EOH (E), VCR3047CE, VCR1837, 4047, 6457NE ONLY
(A/V SELECT)
IC901 BH7634AS
SCART PCB
PJ901
AV1/TV
WS/DEC.J
TR917
PJ902
DECODER/AV2
EXCEPT 260, 460EDG 260, 270EK 260, 261EOH (Y1)

MODE DETECT SWITCH CODE TABLE

OUTPUT \ MODE	EJECT	UNLOADED	POWER OFF (WITH CASSETTE)	REVIEW	PAUSE /SLOW	STOP/PLAY & CUE	FF & RWD
RSW 1	L	H	L	H	L	H	H
RSW 2	L	H	H	H	H	L	L
RSW 3	H	L	L	L	H	H	H


F
G
H
I
J
1
2
3
4
5
6
7
8
TU.V
VHF.L
LPF
+32V
TR3
CURR CONT
+38V
(FROM POWER SUPPLY)
TR4
IC1 µPC574J
EXCEPT 260, 270, 470EK
IC2 LA7910
BAND A
X402 32.768KHz
X401 16MHz
VIDEO CIRCUIT CONTROL
POWER CONTROL
A/V SELECT CONTROL
TU PWM
XC IN
XC OUT
X IN
X OUT
BAND A
BAND B
VJ
AFT.E
AFT
I²C SDA
I²C SCL
SHORT
DAVN
RESET
VCC
P.DOWN
TV/VCR
MODU
WS
WS/DEC J
NT.TRICK
S.L.E
I-HQ MD1
I-HQ MD2
PIC.CTL
NC.CTL
VP
C.ROT
P/S/T
NP
NT3.58REC (OR SECAM)
SEC.MES
CK-DET
TRICK
S.DET
NTSC
EE
EE
AL
AV.S
CTL.A
CTL.B
LM.F
LM.R
TRQUP
RSW1~3
SRP (SUPPLY REEL PULSE)
TRP (TAKE UP REEL PULSE)
ES
SS
REC SAF
REMOCON
IC401 M37777
(SYSTEM CONTROL & SERVO MI-COM)
3S 3S
→|←1S
(DURING SEARCH)
H:ON
TR214
225 2V)
9.1K
9.1K
AL 9V
EA, EM, EK, G20EM, 260, 460EDG, 263, 270EOH (E) 260, 261EOH (Y1) ONLY
TV/VCR
TR12
IC404 LB1641
MOTOR14V
FR402
LM.F
LM.R
Vref
Vcc
Vcc
LM+
LM-
(MOTOR DRIVER)
7.5V
L:ON
TR406
LOADING MOTOR
MODE SW
MECHA. POSITION DETECT
MECHA. BLK
IDL5V
D403
TR403
D404
TR404
TR402
D401
TR401
IDL5V
SW401
REC SAFETY SW (ON→REC ENABLE)
PH401
REMOCON SIG. DET
EXCEPT OEM
PH402
REMOCON SIG. DET
RC SENSOR PCB
OEM ONLY
STB
SYS SO
SYS CLK
SYS SI
A.MUTE
A.EE
REC.S
S.MUTE
SP
A.OSC
A.NT.REC
LDS
AUDIO/OSC CIRCUIT CONTROL
FROM POWER SUPPLY
FL 401 FL DISPLAY
FL+ FL-
G1~10
P1~12
28~37
T0~9
IC407 µPD16312GB
(OPERATION MI-COM)
STB
SI
CLK
SO
S0~11
KEY1~4
15~26
10~13
S0~11
S1
K3, K4
(KEY MATRIX)
S0, S1
K1~K3
(KEY MATRIX)
OPERATION PCB
MAIN PCB
(Y1)
E)
6257NE
(Y1)

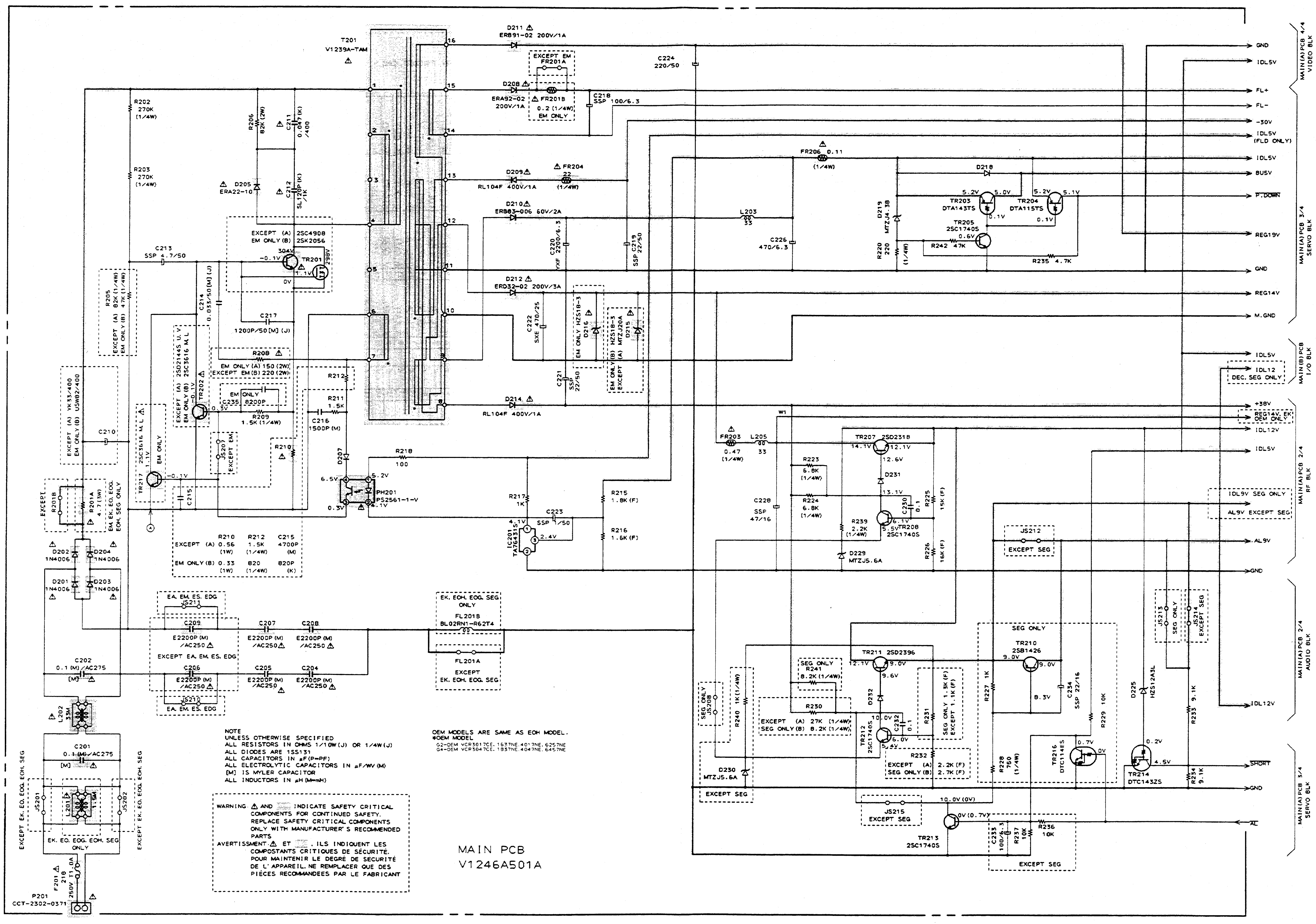
OPERATION & SYSCON
BLOCK DIAGRAM
No.4-4 V124654M
A1


PJ501
V.IN
V.OUT
A.IN
A.R.OUT
A.L.OUT
P502
F.V.IN
GND
IDL12V
F.A.IN
WITH FRONT ONLY
RCA PCB
V1246A502A
P501
IDL12V
EXT.A.SW
CTL.B
INT.V
CTL.A
A.OUT
V.GND
V.IN
S.MUTE
V.OUT
A.GND
AV.S
FULL ERASE
A/C HEAD BLK
P903
F.A.IN
GND
IDL12V
F.V.IN
WITH FRONT ONLY
PJ901
AV1
PJ902
AV2, DECODER
SCART PCB
V1246A503A
P901
WS/DEC.J
SDA
SCL
S.DET
INT.A
IDL12V
A.IN
IDL5V
INT.V
BLANK
A.OUT
V.GND
V.IN
S.MUTE
V.OUT
A.GND
AV.S
SEG ONLY
WITH DEC ONLY
AV1/AV2 ONLY
AV1 ONLY
WS OR N.C
CTL B
TV/VCR
CTL A
N.C
SEG, EOG, EOH, G2-OEM ONLY
SEG ONLY
P902
GND
PB.C
REC.C
B/W SEC
PB ENVE
PB
FSC
C.SYNC
P852B
S-1
COM
S-2
L-2
COM
L-1
G4 ONLY
(4 HEAD MODEL)
P852A
CH2.PB
CH2.REC
CH1.REC
CH1.PB
G2 ONLY
(2 HEAD MODEL)
WF301
FE.GND
FE.H
WF302
A/C.REC
A/C.PB
H.GND
SE.H
CTL-
CTL+
P101
P102
P201
AC INLET
RCA
REG-EK PCB
V1246A5100
P2
WF1
GND
REG14V
MODU
MOD.B
MODB
EK. OEM ONLY
MAIN PCB
V1246A501A
P405
IDL5V
GND
DM POWER
D FG
M GND
DM CONT
DRUM MOTOR
F20EL60
P401
IDL5V
F/R
C FG
CONT REF
CM CONT
I LIMIT
CM POWER
M GND
GND
NC
CAPSTAN MOTOR
F2QTB24
P402
RSW3
RSW2
RSW1
GND
LM+
LM-
MODE DETECT SW
LOADING MOTOR
M
P408
REMOCON
Vcc
GND
OEM ONLY
P409
RC SENSOR PCB
V1246A501C
GP1U281X
P406
KEY2
KEY1
KEY3
S1
S0
P407
OPERATION PCB
V1246A503B
V1246A502B
EXCEPT OEM
OEM ONLY
OPERATION PCB
V1258A5020
OEM ONLY
P550
F.A.IN
GND
IDL12V
F.V.IN
WITH FRONT ONLY
FRONT PCB
V1246A501B
PJ552
PJ551
F.AUDIO.IN
F.VIDEO.IN
A
B
C
D
E
F
G
H
1
2
3
4
5
6

CONNECTION DIAGRAM

No.10-1 V124601M

A2


T201
V1239A-TAM
D211 ER891-02 200V/1A
D208 ERA92-02 200V/1A
EXCEPT EM FR201A
FR201B 0.2 (1/4W) EM ONLY
C218 SSP 100/6.3
C224 220/50
D209 RL104F 400V/1A
FR204 22 (1/4W)
D210 ER883-006 60V/2A
C220 2200/6.3 YXF
C219 SSP 22/50
L203 33
C226 470/6.3
D212 ERD32-02 200V/3A
C222 SXE 470/25
D216 HZS18-3 EM ONLY
D215 HZS18-3 MTZJ20A
C221 SSP 22/50
D214 RL104F 400V/1A
FR206 0.11 (1/4W)
D218
TR203 DTA143TS
TR204 DTA115TS
TR205 2SC1740S
R242 47K
R235 4.7K
D219 MTZJ4.3B
R220 220 (1/4W)
R202 270K (1/4W)
R203 270K (1/4W)
R206 82K (2W)
C211 0.047(K) /400
D205 ERA22-10
C212 SL120P(K) /1K
EXCEPT (A) 2SC4908 EM ONLY (B) 2SK2056
TR201
C213 SSP 4.7/50
R205 EXCEPT (A) 82K (1/4W) EM ONLY (B) 47K (1/4W)
C214 0.033/50(M)(J)
C217 1200P/50(M)(J)
R208 EM ONLY (A) 150 (2W) EXCEPT EM (B) 220 (2W)
TR202 EXCEPT (A) 2SD2144S U.V EM ONLY (B) 2SC3616 K.L
C235 8200P EM ONLY
R209 1.5K (1/4W)
R212
R211 1.5K
C216 1500P (M)
R210
JS207 EXCEPT EM
C210 EXCEPT (A) VK53/400 EM ONLY (B) USW82/400
TR217 2SC3616 K.L EM ONLY
C215
D207
PH201 PS2561-1-V
R218 100
R217 1K
IC201 TA76431S
C223 SSP 1/50
R215 1.8K (F)
R216 1.6K (F)
R210 R212 C215
EXCEPT (A) 0.56 (1W) 1.5K (1/4W) 4700P (M)
EM ONLY (B) 0.33 (1W) 820 (1/4W) 820P (K)
R201B R201A 4.7(5W) EXCEPT EK. EM. EO. EOG. EOH. SEG ONLY
D202 1N4006 D204 1N4006
D201 1N4006 D203 1N4006
JS211 EA. EM. ES. EDG
C209 E2200P (M) /AC250
C207 E2200P (M) /AC250
C208 E2200P (M) /AC250
EXCEPT EA. EM. ES. EDG
C206 E2200P (M) /AC250
C205 E2200P (M) /AC250
C204 E2200P (M) /AC250
JS210 EA. EM. ES. EDG
FL201B BL02RN1-R62T4 EK. EOH. EOG. SEG ONLY
FL201A EXCEPT EK. EOH. EOG. SEG
C202 0.1 (M) /AC275
L202 33M
C201 0.1 (M) /AC275
L201 1.5M
JS201 EXCEPT EK. EO. EOG. EOH. SEG
JS202 EXCEPT EK. EO. EOG. EOH. SEG
EK. EO. EOG. EOH. SEG ONLY
F201 218 250V T1.0A
P201 CCT-2302-0371
FR203 0.47 (1/4W)
L205 33
W1
C228 SSP 47/16
R223 6.8K (1/4W)
R224 6.8K (1/4W)
TR207 2SD2318
D231
R239 2.2K (1/4W)
C230 0.1
TR208 2SC1740S
R225 15K (F)
R226 16K (F)
D229 MTZJ5.6A
JS212 EXCEPT SEG
JS213 SEG ONLY
JS214 EXCEPT SEG
SEG ONLY
TR210 2SB1426
TR211 2SD2396
R241 SEG ONLY 8.2K (1/4W)
R250 EXCEPT (A) 27K (1/4W) SEG ONLY (B) 8.2K (1/4W)
D232
C232 0.1
TR212 2SC1740S
R231 SEG ONLY 1.3K (F) EXCEPT 1.1K (F)
R232 EXCEPT (A) 2.2K (F) SEG ONLY (B) 2.7K (F)
R227 1K
C234 SSP 22/16
R229 10K
R228 750 (1/4W)
TR216 DTC114ES
D225 HZS12A3L
TR214 DTC143ZS
R233 9.1K
R234 9.1K
JS208 SEG ONLY
R240 1K (1/4W)
D230 MTZJ5.6A
EXCEPT SEG
JS215 EXCEPT SEG
TR213 2SC1740S
C233 100/6.3
R237 10K
R236 10K
EXCEPT SEG
GND
IDL5V
FL+
FL-
-30V
IDL5V (FLD ONLY)
IDL5V
BU5V
P.DOWN
REG19V
GND
REG14V
M.GND
MAIN(A)PCB 4/4 VIDEO BLK
MAIN(A)PCB 3/4 SERVO BLK
IDL5V
IDL12 DEC. SEG ONLY
MAIN(B)PCB I/O BLK
+38V
REG14V: EK, OEM ONLY
IDL12V
IDL5V
IDL9V SEG ONLY
AL9V EXCEPT SEG
AL9V
GND
MAIN(A)PCB 2/4 RF BLK
MAIN(A)PCB 2/4 AUDIO BLK
IDL12V
SHORT
GND
AL
MAIN(A)PCB 3/4 SERVO BLK

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/10W(J) OR 1/4W(J)
ALL DIODES ARE 1SS131
ALL CAPACITORS IN µF(P=PF)
ALL ELECTROLYTIC CAPACITORS IN µF/WV (M)
[M] IS MYLER CAPACITOR
ALL INDUCTORS IN µH (M=mH)

OEM MODELS ARE SAME AS EOH MODEL.
*OEM MODEL
G2-OEM VCR3017CE. 1637NE. 4017NE. 6257NE
G4-OEM VCR3047CE. 1837NE. 4047NE. 6457NE

WARNING: ⚠ AND ▨ INDICATE SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY. REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSMENT: ⚠ ET ▨ . ILS INDIQUENT LES COMPOSTANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL. NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

MAIN PCB
V1246A501A

EXCEPT EM AC220~240V
EM AC110~240V

CAUTION.
AS THE PRIMARY SIDE OF THE MAIN PCB'S POWER SECTION (WHITE COLORED PART) CONTAINS HIGH VOLTAGE. THERE IS RISK OF ELECTRIC SHOCK. BE SURE TO USE EXTREME CAUTION.

*INDICATED VOLTAGE WERE MEASURED DURING E-E MODE. THE DC VOLTMETER'S NEGATIVE INPUT WAS CONNECTED TO THE Ⓐ POINT WHEN THE PRIMARY SECTION WAS MEASURED.
*THE PRIMARY INPUT VOLTAGE WAS AC 220V
*( ) INDICATED SEG MODEL VOLTAGE

▨ B (POWER SUPPLY) LINE

MAIN 1/4
POWER BLK
SCHEMATIC DIAGRAM

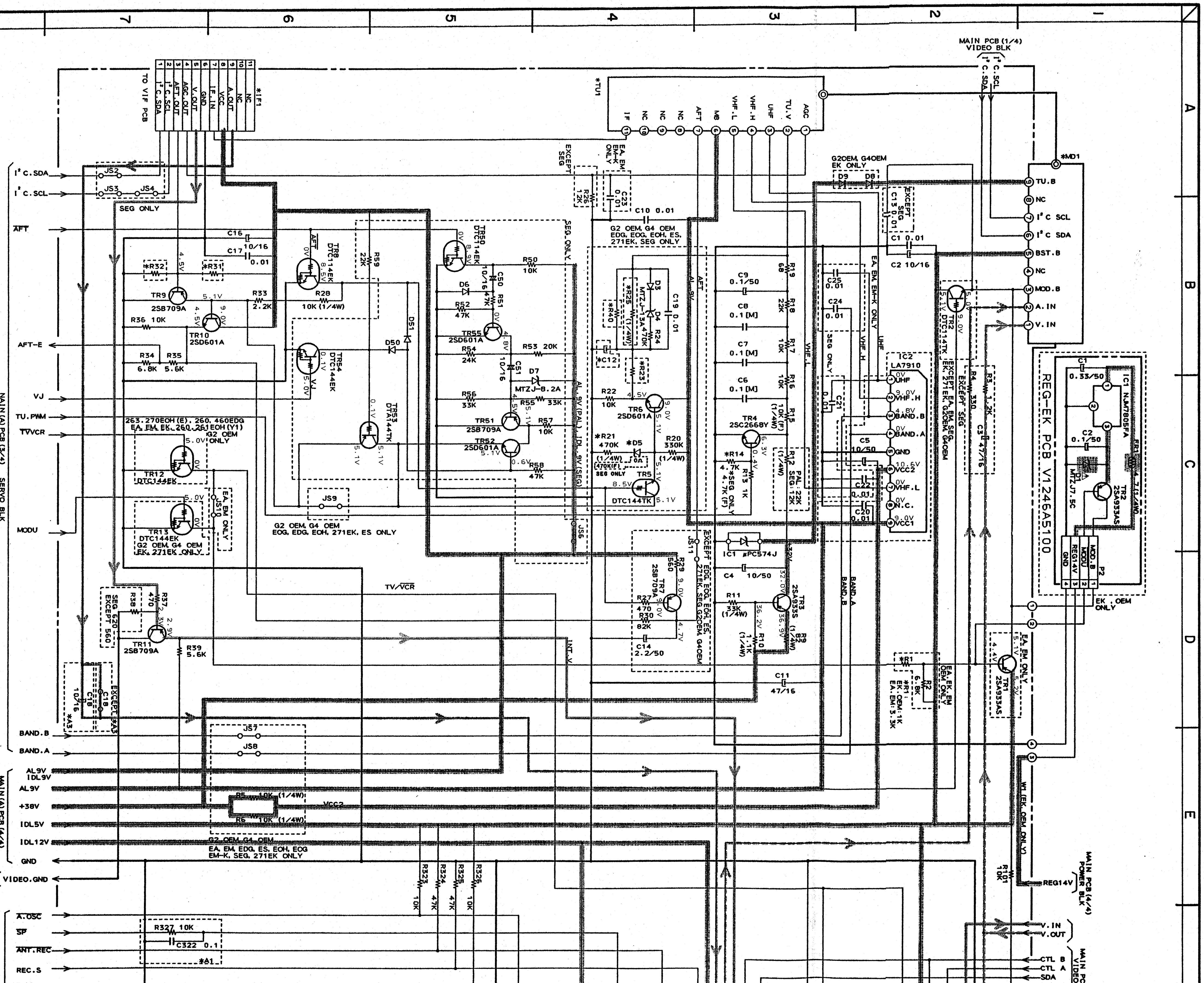
No.10-2 V124602M
A1

	*TU1	*MD1	*IF1
EA	TELE1-012A	YAA21-1121G	NOR-EOG
EK	TELB1-016A	MDLP3E008A	NOR-EK
271EK	TELE4-045A	MDLP3E008A	NOR-EK
EDG	TELE4-045A	YAA21-1108G	NOR-EDG
EOG, EOH	TELE4-045A	YAA21-1045H	NOR-EOG
EM	TELE1-012A	YAA21-0808G	NOR-EM
EM-K	TELE1-012A	YAA21-1031G	NOR-EM-K
ES	TELE1-045A	YAA21-1046H	NOR-EK
SEG	TELE4-049A	YAA41-0081G	NOR-SEG

	*TU1	*MD1	*IF1
G2 OEM	TELE4-045A	MDLP3E008A	NOR-EOG
G4 OEM	TELE4-045A	MDLP3E008A	NOR-EOG

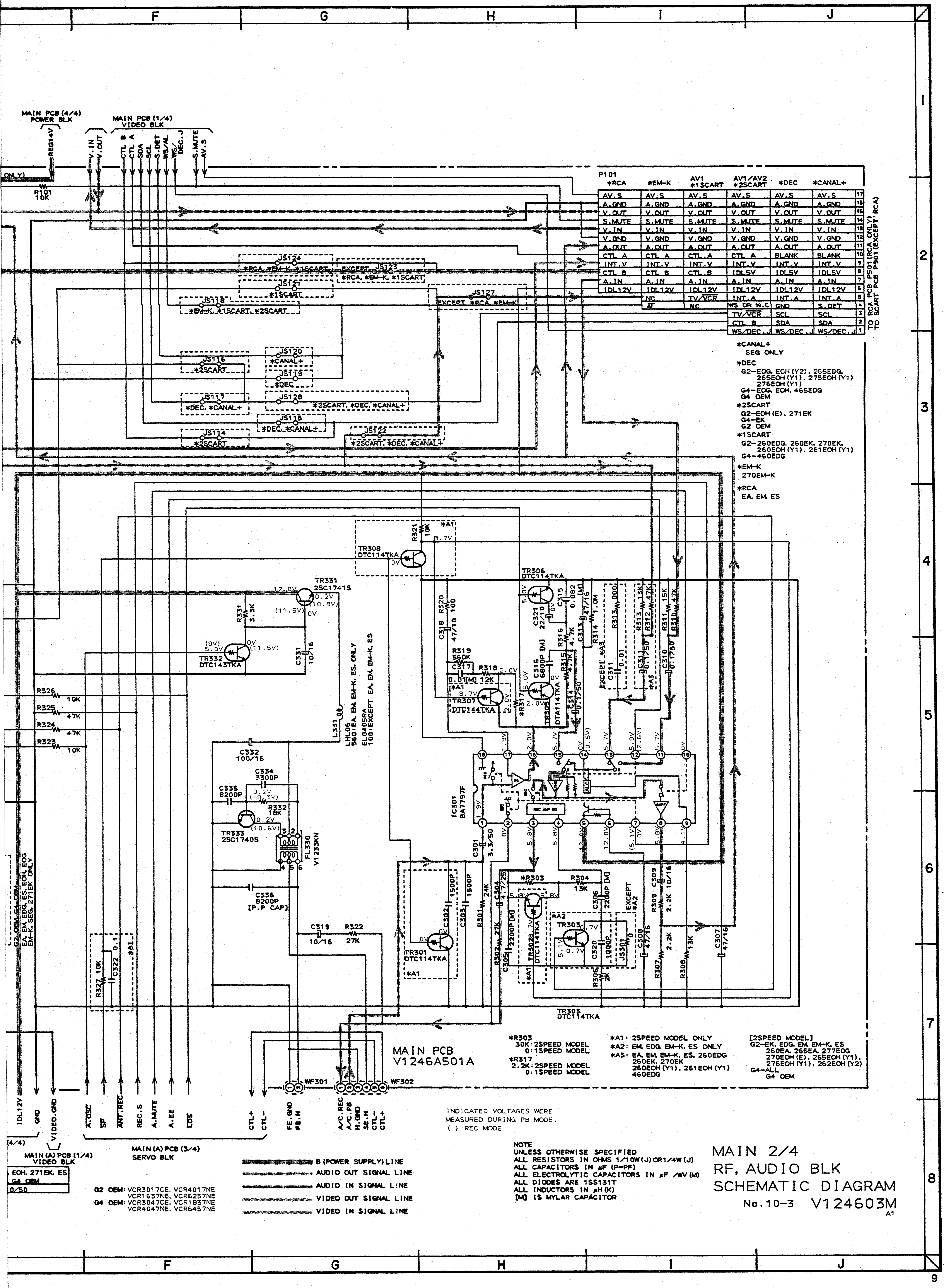
	SEG	EDG, EOG, EOH, 271EK, ES . G2 OEM, G4 OEM	EA, EK, EM, EM-K
R23	47K	12K	-
R25	1M (F)	1M	-
R31	240K	390K	390K
R32	180K	330K	330K
R40	-	-	-

	SEG	EDG, EOG, EOH, 271EK, ES G2 OEM, G4 OEM
C12	1/50	10/50



8
7
6
5
4
3
2
1
A
B
C
D
E
MAIN PCB (1/4) VIDEO BLK
I²C.SCL
I²C.SDA
*TU1
IF
NC
NC
NC
AFT
MB
VHF.L
VHF.H
UHF
TU.V
AGC
*IF1
TO VIF PCB
I²C.SDA
I²C.SCL
AFT OUT
AGC OUT
V.OUT
GND
IF IN
VCC
A.OUT
NC
NC
*MD1
TU.B
NC
I²C SCL
I²C SDA
BST.B
NC
MOD.B
A.IN
V.IN
NAIN (A) PCB (3/4) SERVO BLK
I²C.SDA
I²C.SCL
AFT
AFT-E
VJ
TU.PWM
TVVCR
MODU
BAND.B
BAND.A
JS2
JS3
JS4
SEG ONLY
C16 10/16
C17 0.01
*R32
*R31
TR9 2SB709A
TR10 2SD601A
R33 2.2K
R36 10K
R34 6.8K
R35 5.6K
TR8 DTC114EK
R28 10K (1/4W)
R59 22K
TR50 DTC114EK
C50 10/16
R51 47K
D6
R52 47K
TR55 2SD601A
R54 24K
C51 10/16
R53 20K
R50 10K
D7 MTZJ-8.2A
R55 33K
R56 33K
TR51 2SB709A
R57 10K
TR52 2SD601A
R58 47K
D51
D50
TR54 DTC144EK
TR53 DTA144TK
263.270EOH (E), 260.460EDG
EA, EM, EK, 260.261EOH (Y1)
G2 OEM ONLY
TR12 DTC144EK
TR13 DTC144EK
G2 OEM, G4 OEM EK, 271EK ONLY
EA, EM ONLY
JS1
JS9
G2 OEM, G4 OEM EOG, EDG, EOH, 271EK, ES ONLY
SEG ONLY
AL.9V (PAL), IDL.9V (SEG)
JS6
TV/VCR
R38
SEG 620 EXCEPT 560
R37 470
TR11 2SB709A
R39 5.6K
C18 10/16
*A3
EXCEPT *A3
JS7
JS8
R5 10K (1/4W)
R6 10K (1/4W)
VCC2
G2 OEM, G4 OEM
EA, EM, EDG, ES, EOH, EOG EM-K, SEG, 271EK ONLY
MAIN (A) PCB (4/4) POWER BLK
AL9V
IDL9V
AL9V
+38V
IDL5V
IDL12V
GND
VIDEO.GND
MAIN (A) PCB (1/4) VIDEO BLK
A.OSC
SP
ANT.REC
REC.S
MAIN SERVO
R327 10K
C322 0.1
*A1
R323 10K
R324 47K
R325 47K
R326 10K
EXCEPT SEG
R26 12K
EA, EM EM-K ONLY
C23 0.01
C10 0.01
G2 OEM, G4 OEM EDG, EOG, EOH, ES, 271EK, SEG ONLY
AFT
AL.9V
*R25
*R40
D3
MTZJ-13A
D4
R24 470K
C19 0.01
*C12
*R23
R22 10K
TR6 2SD601A
*R21 470K (1/4W)
*D5
(470K(F)) SEG ONLY
R20 330K (1/4W)
TR5 DTC144TK
C9 0.1/50
R19 68
C8 0.1 [M]
R18 22K
C7 0.1 [M]
R17 10K
C6 0.1 [M]
R16 10K
TR4 2SC2668Y
R15 10K (F) (1/4W)
*R14 4.7K *SEG ONLY 4.7K (F)
R13 1K
R12 PAL 22K SEG 12K
VHF.L
JS11
EXCEPT EDG, EOG, EOH, ES, 271EK, SEG, G2OEM, G4OEM
R29 560
TR7 2SB709A
R27 470
R30 82K
C14 2.2/50
IC1 μPC574J
C4 10/50
R11 33K (1/4W)
TR3 2SA933S
R9 (1/4W)
R10 1K (1/4W)
C11 47/16
G2OEM, G4OEM EK ONLY
D9
D8
EXCEPT SEG
C13 0.01
C1 0.01
C2 10/16
C25 0.01
C24 0.01
EA, EM, EM-K ONLY
VHF.H
UHF
SEG ONLY
IC2 LA7910
UHF
VHF.H
BAND.B
BAND.A
GND
VCC2
VHF.L
N.C.
VCC1
C21 0.01
C5 10/50
C22 0.01
C20 0.01
TR2 DTC114TK
EK, 271EK, G2OEM, G4OEM
EXCEPT SEG
R4 330
R3 1.2K
C3 47/16
REG-EK PCB V1246A5100
C1 0.33/50
IC1 NJM7805FA
C2 0.1/50
FR1 4.7 (1/4W)
D1 MTZJ7.5C
TR2 2SA933AS
P2
MOD.B
MODU
REG14V
GND
EK, OEM ONLY
BAND.A
BAND.B
INT.V
EA, EM ONLY
TR1 2SA933AS
*R1
EA, EK, EM OEM ONLY
R2 6.8K
*R1: EK: 1K OEM: 1K EA, EM: 3.3K
W1 (EK, OEM ONLY)
R101 10K
REG14V
MAIN PCB (4/4) POWER BLK
V.IN
V.OUT
CTL B
CTL A
SDA
MAIN PCB VIDEO

G2 OEM: VCR30
VCR16
G4 OEM: VCR30
VCR40


MAIN PCB (4/4)
POWER BLK
REG14V
MAIN PCB (1/4)
VIDEO BLK
V.IN
V.OUT
CTL B
CTL A
SDA
SCL
S.DET
WS/AL
WS/DEC.J
S.MUTE
AV.S
R101
10K
JS124
*RCA, *EM-K, *1SCART
JS123
EXCEPT *RCA, *EM-K, *1SCART
JS121
*1SCART
JS118
*EM-K, *1SCART, *2SCART
JS127
EXCEPT *RCA, *EM-K
JS116
*2SCART
JS120
*CANAL+
JS119
*DEC
JS117
*DEC, *CANAL+
JS128
*2SCART, *DEC, *CANAL+
JS115
*DEC, *CANAL+
JS114
*2SCART
JS122
*2SCART, *DEC, *CANAL+
G2 OEM, G4 OEM
EA, EM, EDG, ES, EOH, EOG
EM-K, SEG, 271EK ONLY
R321
10K
*A1
8.7V
TR308
DTC114TKA
0V
TR331
2SC1741S
12.0V
0.2V
(10.8V)
(11.5V)
0V
R331
3.3K
TR332
DTC143TKA
(0V)
5.0V
0V
(11.5V)
C331
10/16
L331
LHL06
560:EA, EM, EM-K, ES, ONLY
EL0405RA
100:EXCEPT EA, EM, EM-K, ES
R326
10K
R325
47K
R324
47K
R323
10K
C332
100/16
C334
3300P
C335
8200P
0.2V
(-0.3V)
R332
18K
0.2V
(10.6V)
TR333
2SC1740S
FL330
V1233KN
C336
8200P
[P.P CAP]
C319
10/16
R322
27K
R327 10K
C322 0.1
*A1
TR306
DTC114TKA
5.0V
C321
22/10
C315
0.082
C313
47/16
[M]
R314
1.0M
R313
000
EXCEPT *A3
C311
0.01
R313
13K
R312
47K
C311
0.1/50
*A3
R311
15K
R310
47K
C310
0.1/50
C318
47/10
R320
100
R319
560K
C317
0.01[M]
R318
12K
2.0V
*A1
8.7V
TR307
DTC144TKA
2.0V
*R317
5.0V
2.0V
C316
6800P [M]
TR305
DTA114TKA
R315
4.7K
R316
4.7K
C314
0.1/50
1.9V
2.0V
5.7V
0V
(0.5V)
5.7V
5.0V
(2.6V)
5.7V
0V
IC301
BA7797F
ALC
1.9V
0V
5.8V
5.8V
12.0V
12.0V
0V
(5.1V)
5.8V
4.1V
C301
3.3/50
1500P
C302
C303
1500P
R301
24K
TR301
DTC114TKA
*A1
0V
C304
4.7/25
*R303
R304
13K
C306
2200P [M]
EXCEPT
*A2
R309
2.2K
C309
10/16
R302
27K
C305
2200P [M]
TR302
DTC114TKA
8.7V
5.8V
*A2
TR303
5.1V
0.7V
C320
1000P
JS301
0
R306
2K
C308
47/16
R307
2.2K
R308
13K
C307
47/16
TR303
DTC114TKA
WF301
WF302
IDL12V
GND
VIDEO.GND
A.OSC
SP
ANT.REC
REC.S
A.MUTE
A.EE
LDS
CTL+
CTL-
FE.GND
FE.H
A/C.REC
A/C.PB
H.GND
SE.H
CTL-
CTL+
(4/4)
MAIN (A) PCB (1/4)
VIDEO BLK
MAIN (A) PCB (3/4)
SERVO BLK
EOH, 271EK, ES
G4 OEM
10/50
F
G
H
I
J
1
2
3
4
5
6
7
8
9
A1

P101

*RCA	*EM-K	AV1 *1SCART	AV1/AV2 *2SCART	*DEC	*CANAL+	
AV.S	AV.S	AV.S	AV.S	AV.S	AV.S	17
A.GND	A.GND	A.GND	A.GND	A.GND	A.GND	16
V.OUT	V.OUT	V.OUT	V.OUT	V.OUT	V.OUT	15
S.MUTE	S.MUTE	S.MUTE	S.MUTE	S.MUTE	S.MUTE	14
V.IN	V.IN	V.IN	V.IN	V.IN	V.IN	13
V.GND	V.GND	V.GND	V.GND	V.GND	V.GND	12
A.OUT	A.OUT	A.OUT	A.OUT	A.OUT	A.OUT	11
CTL A	CTL A	CTL.A	CTL A	BLANK	BLANK	10
INT.V	INT.V	INT.V	INT.V	INT.V	INT.V	9
CTL B	CTL B	CTL.B	IDL5V	IDL5V	IDL5V	8
A.IN	A.IN	A.IN	A.IN	A.IN	A.IN	7
IDL12V	IDL12V	IDL12V	IDL12V	IDL12V	IDL12V	6
	NC	TV/$\overline{\text{VCR}}$	INT.A	INT.A	INT.A	5
	$\overline{\text{AI}}$	NC	WS OR N.C	GND	S.DET	4
			TV/$\overline{\text{VCR}}$	SCL	SCL	3
			CTL B	SDA	SDA	2
			WS/DEC.J	WS/DEC.J	WS/DEC.J	1

TO RCA PCB P501 (RCA ONLY)
TO SCART PCB P901 (EXCEPT RCA)

*CANAL+
SEG ONLY
*DEC
G2-EOG, EOH (Y2), 265EDG,
265EOH (Y1), 275EOH (Y1)
276EOH (Y1)
G4-EOG, EOH, 465EDG
G4 OEM
*2SCART
G2-EOH (E), 271EK
G4-EK
G2 OEM
*1SCART
G2-260EDG, 260EK, 270EK,
260EOH (Y1), 261EOH (Y1)
G4-460EDG
*EM-K
270EM-K
*RCA
EA, EM, ES

*R303
30K: 2SPEED MODEL
0: 1SPEED MODEL
*R317
2.2K: 2SPEED MODEL
0: 1SPEED MODEL

*A1: 2SPEED MODEL ONLY
*A2: EM, EDG, EM-K, ES ONLY
*A3: EA, EM, EM-K, ES, 260EDG
260EK, 270EK
260EOH (Y1), 261EOH (Y1)
460EDG

[2SPEED MODEL]
G2-EK, EDG, EM, EM-K, ES
260EA, 265EA, 277EOG
270EOH (E), 265EOH (Y1),
276EOH (Y1), 262EOH (Y2)
G4-ALL
G4 OEM

MAIN PCB
V1246A501A

INDICATED VOLTAGES WERE
MEASURED DURING PB MODE.
( ) : REC MODE

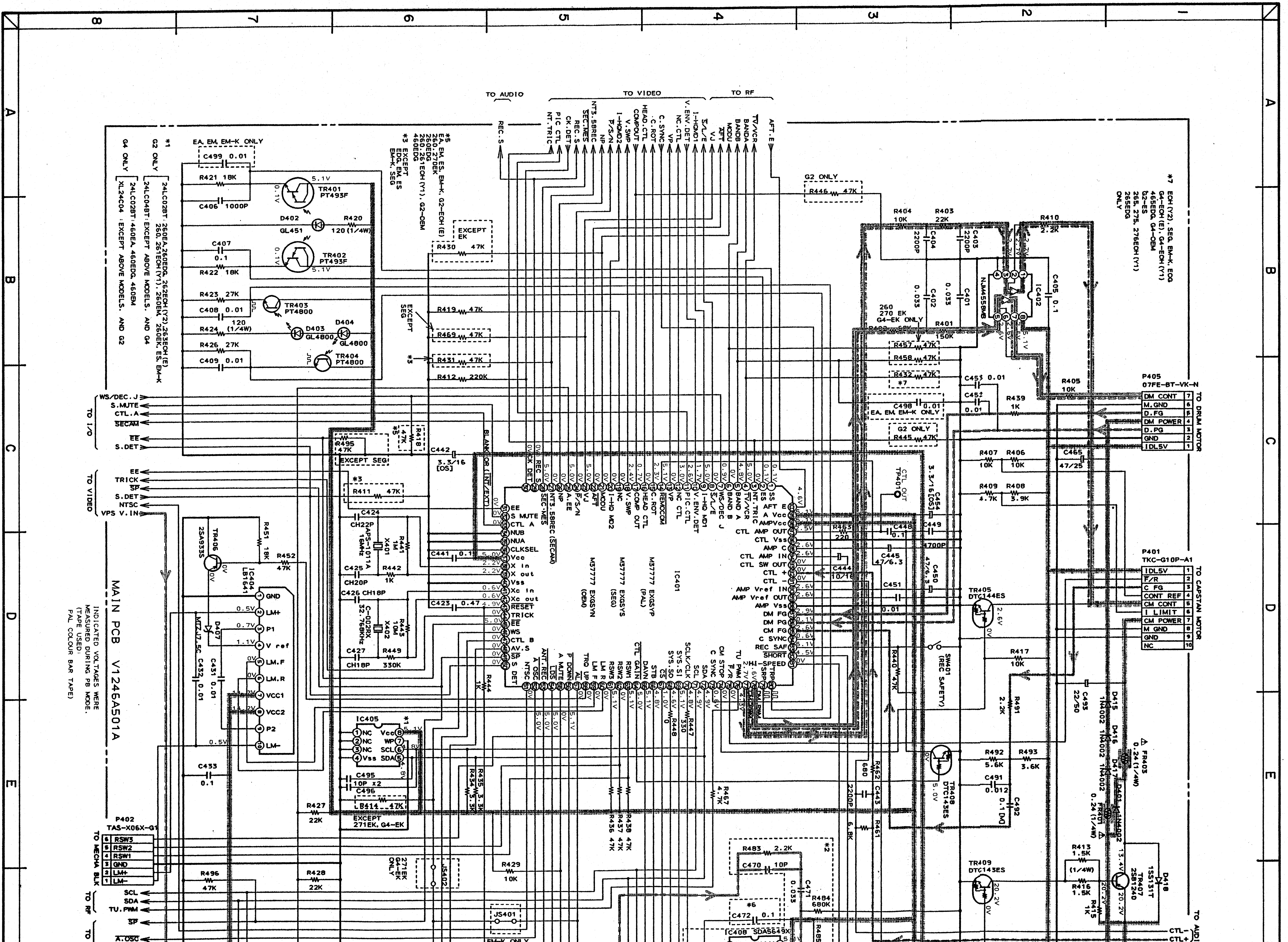
G2 OEM: VCR3017CE, VCR4017NE
VCR1637NE, VCR6257NE
G4 OEM: VCR3047CE, VCR1837NE
VCR4047NE, VCR6457NE

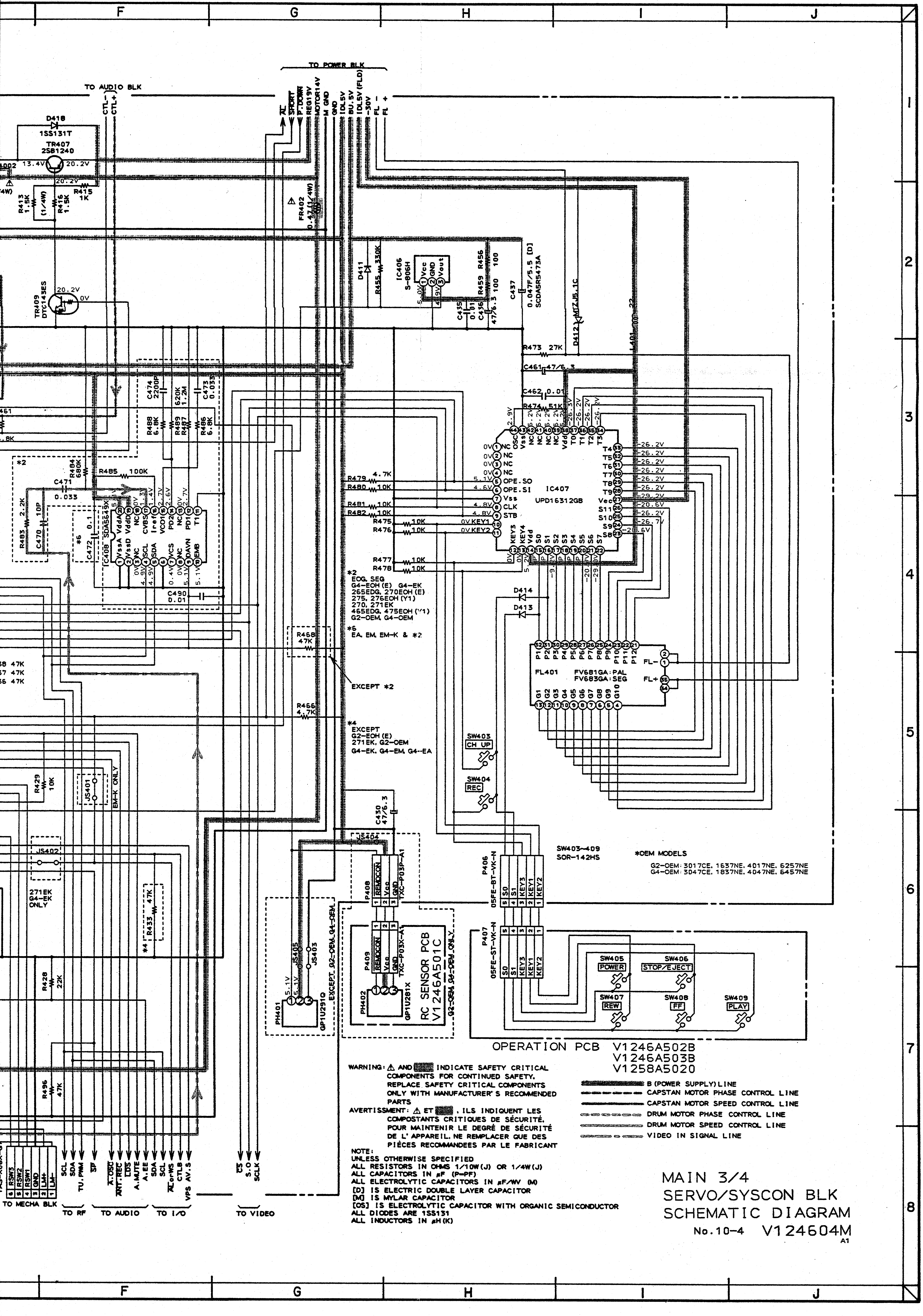
B (POWER SUPPLY) LINE
AUDIO OUT SIGNAL LINE
AUDIO IN SIGNAL LINE
VIDEO OUT SIGNAL LINE
VIDEO IN SIGNAL LINE

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/10W (J) OR 1/4W (J)
ALL CAPACITORS IN µF (P=PF)
ALL ELECTROLYTIC CAPACITORS IN µF /WV (M)
ALL DIODES ARE 1SS131T
ALL INDUCTORS IN µH (K)
[M] IS MYLAR CAPACITOR

MAIN 2/4
RF, AUDIO BLK
SCHEMATIC DIAGRAM

No.10-3 V124603M


MAIN PCB V1246A501A
INDICATED VOLTAGES WERE MEASURED DURING PB MODE.
(TAPE USED: PAL COLOUR BAR TAPE)
TO AUDIO
TO VIDEO
TO RF
TO I/O
TO VIDEO
TO DRUM MOTOR
TO CAPSTAN MOTOR
TO MECHA BLK
TO RF
TO AUDIO
IC401 M37777 EXGSYP (PAL) M37777 EXGSYS (SEG) M37777 EXGSYN (OEM)
IC402 NJM4558MB
IC404 LB1641
IC405
P401 TKC-G10P-A1
P402 TAS-X06X-G1
P405 07FE-BT-VK-N
TR401 PT493F
TR402 PT493F
TR403 PT4800
TR404 PT4800
TR405 DTC144ES
TR406 2SA933S
TR407 2SB1240
TR408 DTC143ES
TR409 DTC143ES
X401 CSA16MHz
X402 C-002RX 32.768KHz
SW401 (REC SAFETY)
*1 G2 ONLY 24LC02BT: 260EA, 260EG, 262EOH(Y2), 263EOH(E) 260, 261EOH(Y1), 260EK, ES, EM-K
24LC04BT: EXCEPT ABOVE MODELS. AND G4
G4 ONLY 24LC02BT: 460EA, 460EG, 460EM
XL24C04: EXCEPT ABOVE MODELS. AND G2
*3 EXCEPT EDG, EM, ES EM-K, SEG
*5 EA, EM, ES, EM-K, G2-EOH (E) 260, 270EK 260EDG, 261EOH (Y1), G2-OEM 460EDG
*7 EOH (Y2), SEG, EM-K, EOG G4-EOH (E), G4-EOH (Y1) 465EDG, G4-OEM G2-ES 265, 275, 276EOH (Y1) 265EDG ONLY
DM CONT
M.GND
D.FG
DM POWER
D.PG
GND
IDL5V
IDL5V
F/R
C FG
CONT REF
CM CONT
I LIMIT
CM POWER
M GND
GND
NC
RSW3
RSW2
RSW1
GND
LM+
LM-
SCL
SDA
TU.PWM
SP
A.OSC
WS/DEC.J
S.MUTE
CTL.A
SECAM
EE
S.DET
EE
TRICK
SP
S.DET
NTSC
VPS V.IN
REC.S
NT.TRIC
P/C CTL
CK.DET
REC.S
SEC.MES
NT3.58REC
NP
F/S/N
I-HO MD2
V.SWP
COMPOUT
HEAD CTL
C.ROT
C.SYNC
NC CTL
VP
V.ENV.DET
I-HO MD1
E/L/E
VJ
AFT
MODU
BAND A
BAND B
TV/VCR
AFT.E


TO POWER BLK
AL
SHORT
P.DOWN
REG19V
MOTOR14V
M GND
GND
IDL5V
BU.5V
IDL5V (FLD)
-30V
FL -
FL +
TO AUDIO BLK
CTL-
CTL+
D418
1SS131T
TR407
2SB1240
13.4V
20.2V
R413 1.5K
R416 1.5K
(1/4W)
R415 1K
FR402 0.47 (1/4W)
TR409 DTC143ES
0V
D411
R455 330K
IC406 S-806H
Vcc
GND
Vout
C435 0.01
C436 47/6.3
R459 100
R456 100
C437 0.047F/5.5 [D] SCDA5R5473A
D412 MTZJ5.1C
L401 22
R473 27K
C461 47/6.3
C462 0.01
R474 51K
C474 2200P
C473 0.033
R488 6.8K
R489 620K
R487 1.2M
R486 6.8K
R484 680K
R485 100K
R483 2.2K
C470 10P
C471 0.033
C472 0.1
C490 0.01
IC408 SDA5649X
VssA
VssD
NC
SCL
SDA
VCS
DAVN
EMB
VddA
VddD
CVBS
Iref
VCO1
PD2
PD1
T1
IC407 UPD16312GB
OSC
Vss
OPE.SO
OPE.SI
CLK
STB
KEY1
KEY2
KEY3
KEY4
Vdd
Vee
R479 4.7K
R480 10K
R481 10K
R482 10K
R475 10K
R476 10K
R477 10K
R478 10K
D413
D414
FL401
FV681GA: PAL
FV683GA: SEG
FL-
FL+
R468 47K
R466 4.7K
EXCEPT *2
*2 EOG, SEG G4-EOH (E) G4-EK 265EDG, 270EOH (E) 275, 276EOH (Y1) 270, 271EK 465EDG, 475EOH (Y1) G2-OEM, G4-OEM
*6 EA, EM, EM-K & *2
*4 EXCEPT G2-EOH (E) 271EK, G2-OEM G4-EK, G4-EM, G4-EA
SW403 CH UP
SW404 REC
C430 47/6.3
JS404
P408
REMOCON
Vcc
GND
TXC-P03P-A1
P409
TXC-P03X-A1
PH402
GP1U281X
RC SENSOR PCB
V1246A501C
G2-OEM G4-OEM ONLY
PH401
GP1U291Q
JS405
JS403
EXCEPT G2-OEM G4-OEM
5.1V
SW403-409
SOR-142HS
*OEM MODELS
G2-OEM: 3017CE, 1637NE, 4017NE, 6257NE
G4-OEM: 3047CE, 1837NE, 4047NE, 6457NE
P406
05FE-BT-VK-N
P407
05FE-ST-VK-N
S0
S1
SW405 POWER
SW406 STOP/EJECT
SW407 REW
SW408 FF
SW409 PLAY
OPERATION PCB V1246A502B
V1246A503B
V1258A5020
R429 10K
JS401
EM-K ONLY
JS402
271EK G4-EK ONLY
*4 R433 47K
R428 22K
R496 47K
TO MECHA BLK
RSW3
RSW2
RSW1
GND
LM+
LM-
TO RF
SCL
SDA
TU.PWM
SP
TO AUDIO
A.OSC
ANT.REC
LDS
A.MUTE
A.EE
TO I/O
SDA
SCL
AL or WS
CTLB
VPS AV.S
TO VIDEO
CS
S.O
SCLK
F
G
H
I
J
1
2
3
4
5
6
7
8

WARNING: ⚠ AND ▨ INDICATE SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY. REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSMENT: ⚠ ET ▨ , ILS INDIQUENT LES COMPOSTANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

NOTE:
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/10W(J) OR 1/4W(J)
ALL CAPACITORS IN µF (P=PF)
ALL ELECTROLYTIC CAPACITORS IN µF/WV (M)
[D] IS ELECTRIC DOUBLE LAYER CAPACITOR
[M] IS MYLAR CAPACITOR
[OS] IS ELECTROLYTIC CAPACITOR WITH ORGANIC SEMICONDUCTOR
ALL DIODES ARE 1SS131
ALL INDUCTORS IN µH (K)

▬ B (POWER SUPPLY) LINE
▬ CAPSTAN MOTOR PHASE CONTROL LINE
▬ CAPSTAN MOTOR SPEED CONTROL LINE
▬ DRUM MOTOR PHASE CONTROL LINE
▬ DRUM MOTOR SPEED CONTROL LINE
▬ VIDEO IN SIGNAL LINE

MAIN 3/4
SERVO/SYSCON BLK
SCHEMATIC DIAGRAM
No.10-4 V124604M
A1

PRINCIPAL PARTS LOCATION

ICs

IC1	H6
IC2	H5
IC201	B4
IC301	C6
IC401	E2
IC402	D2
IC404	C4
IC405	G1
IC406	B1
IC407	F1
IC408	G1
IC601	F4,5
IC602	E4
IC697	G5,6
IC751	F6
IC761	G5
IC851	F5

TRANSISTORs

TR1	G6
TR2	H6
TR3	H6
TR4	G6
TR5	H3
TR6	H5
TR7	H3
TR8	H4
TR9	H3
TR10	H3
TR11	H3
TR12	H2
TR13	H2
TR50	H4
TR51	H4
TR52	H4
TR53	H3
TR54	H3
TR55	H4
TR201	A5
TR202	A5
TR203	B4
TR204	B4
TR205	B5
TR207	A2
TR208	A2
TR210	A2
TR211	A2
TR212	A2
TR213	A3
TR214	B3
TR216	A3
TR217	A5
TR301	C6
TR302	C6
TR303	C6
TR305	D6
TR306	D6
TR307	D6
TR308	C6
TR331	C6
TR332	D5
TR333	C6
TR401	B3,4
TR402	G,H3,4
TR403	F2
TR404	D3
TR405	C4
TR406	C4
TR407	C5
TR408	E1
TR409	C5
TR601	F4
TR603	F5
TR604	F5
TR606	F4
TR607	F4
TR608	F4
TR611	F5
TR612	F5
TR614	F4
TR615	F4,5
TR652	F5
TR653	D5
TR654	D5
TR656	D5
TR657	D5
TR658	D5
TR671	G3
TR672	G4
TR674	G4
TR719	D4
TR761	G5
TR762	G5

CONNECTORs

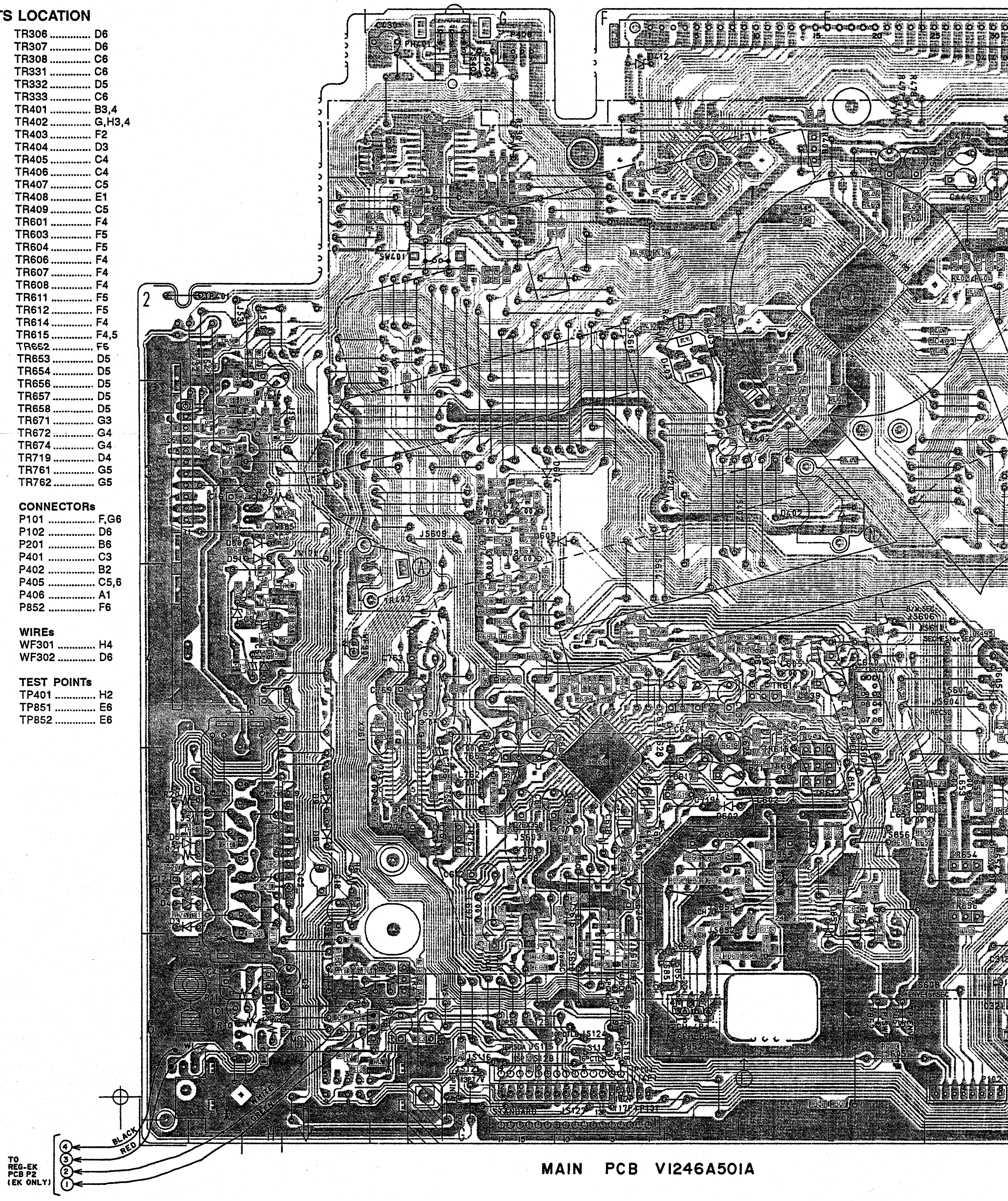
P101	F,G6
P102	D6
P201	B6
P401	C3
P402	B2
P405	C5,6
P406	A1
P852	F6

WIREs

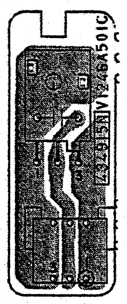
WF301	H4
WF302	D6

TEST POINTs

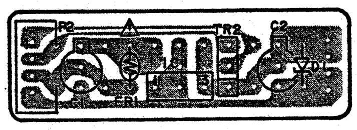
TP401	H2
TP851	E6
TP852	E6


TO
REG-EK
PCB P2
(EK ONLY)
1
2
3
4
BLACK
RED
2
SW401
IC401

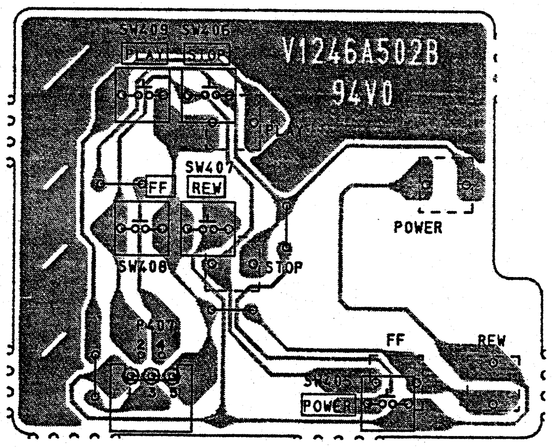
MAIN PCB VI246A501A


V1246A501C

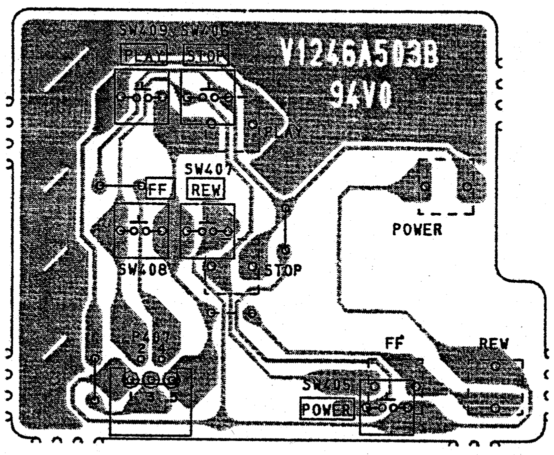
RC SENSOR PCB
VI246A501C



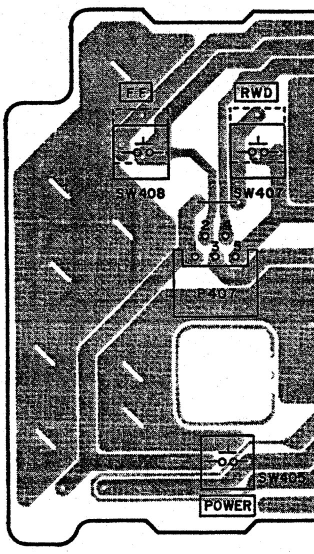
REG-EK PCB
VI246A5100


V1246A502B
94V0
SW407
FF
REW
SW408
STOP
POWER
FF
REW
POWER

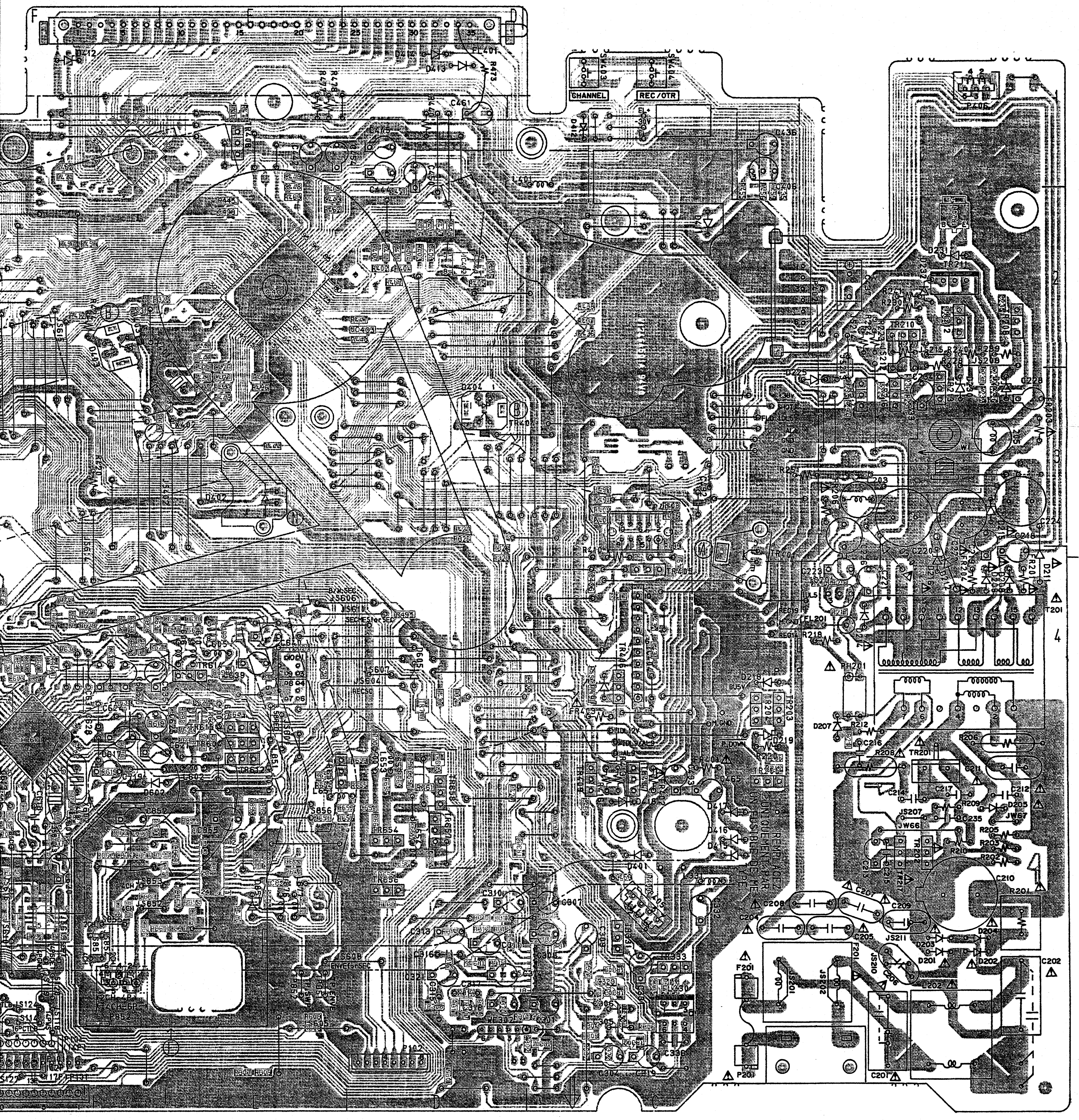
OPERATION PCB VI246A502B


V1246A503B
94V0
SW407
FF
REW
SW408
STOP
POWER
FF
REW
POWER

OPERATION PCB VI246A503B


FF
RWD
SW408
POWER

OPERATION PC
VI258A5020

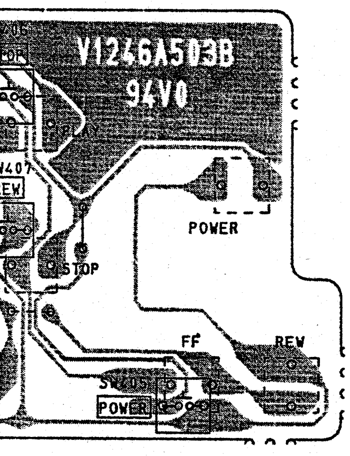

CHANNEL
REC/OTR
SW403
SW404
F201
P201
C201
C202
T201
D211
RH201

IN PCB VI246A501A

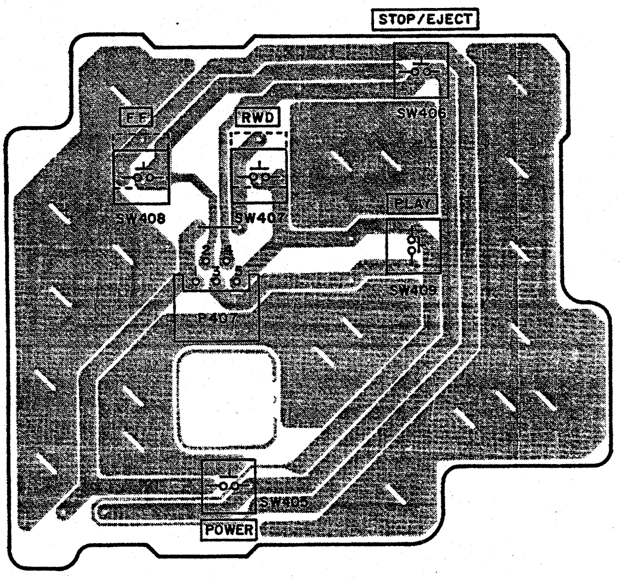
WARNING: ⚠ INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: ⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT

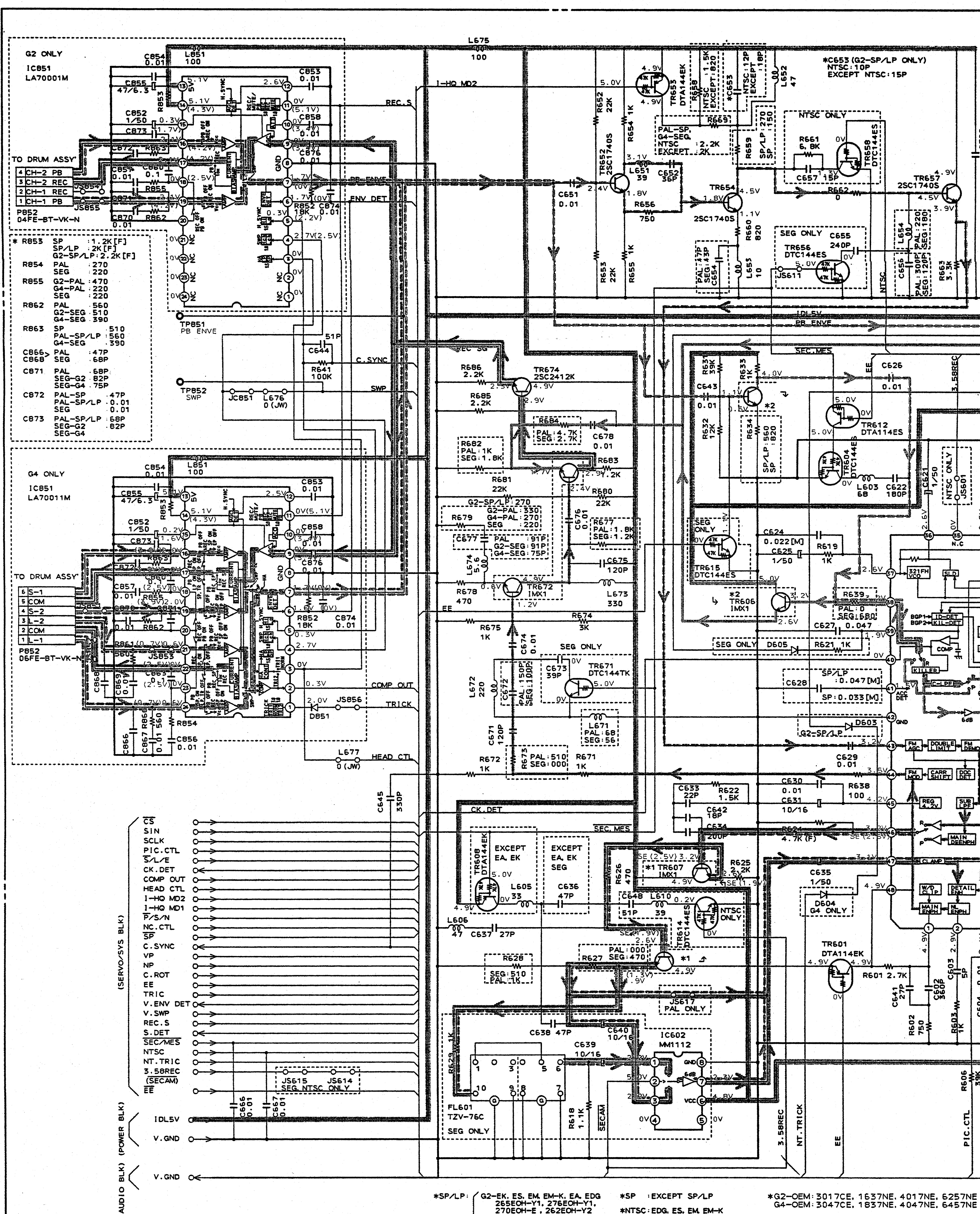
NOTE: PARTS DIFFER DEPENDING ON MODEL NUMBER. REFER TO SCHEMATIC DIAGRAMS FOR PERTINENT PARTS INFORMATION.


V1246A503B
94V0
POWER
STOP
FF
REW
POWER

PCB VI246A503B


STOP/EJECT
FF
RWD
PLAY
SW408
SW405
SW409
POWER

OPERATION PCB (OEM)
VI258A5020

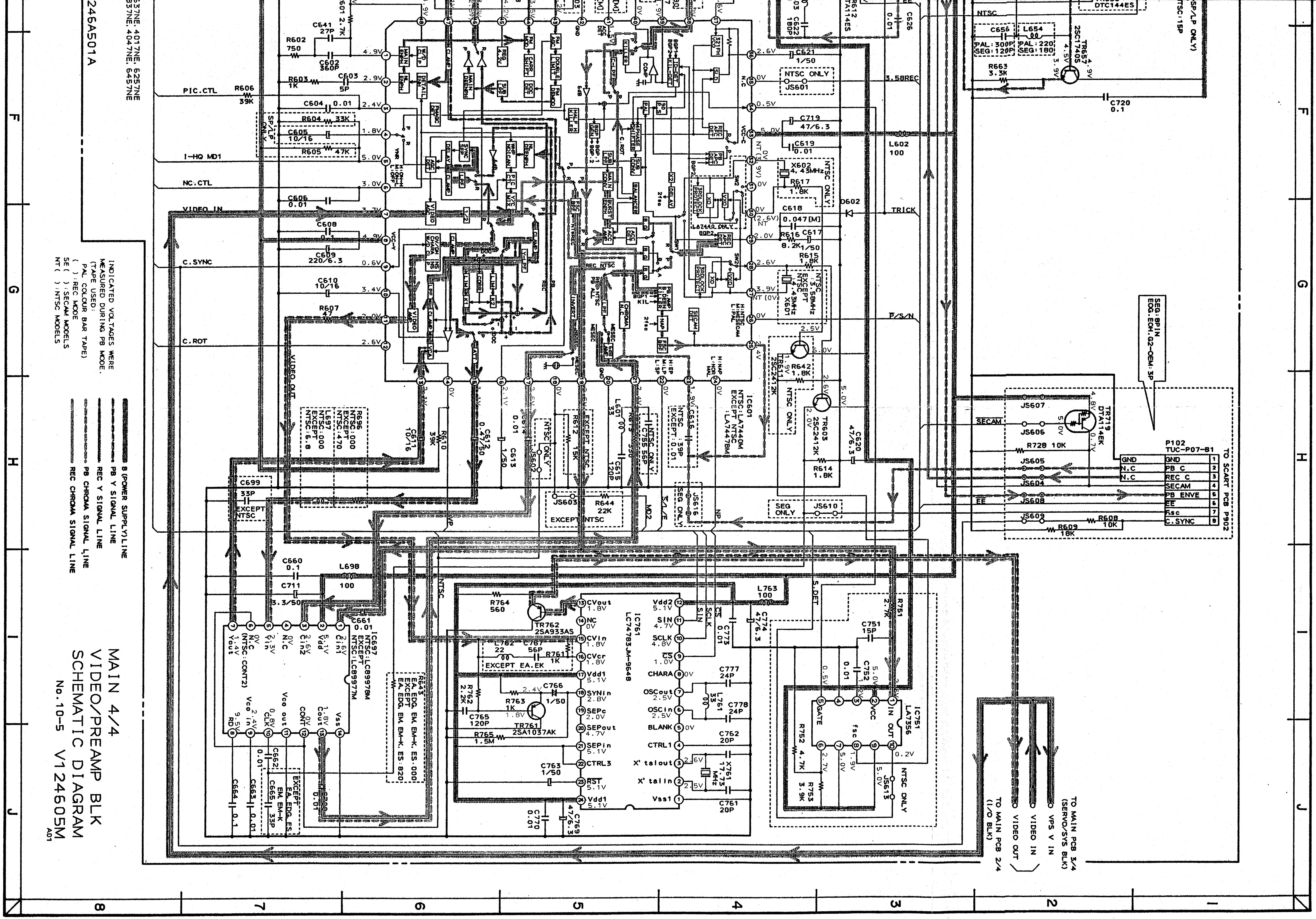

G2 ONLY
IC851
LA70001M
TO DRUM ASSY
P852
04FE-BT-VK-N
G4 ONLY
IC851
LA70011M
P852
06FE-BT-VK-N
* R853 SP :1.2K[F]
SP/LP :2K[F]
G2-SP/LP:2.2K[F]
R854 PAL :270
SEG :220
R855 G2-PAL :470
G4-PAL :220
SEG :220
R862 PAL :560
G2-SEG :510
G4-SEG :390
R863 SP :510
PAL-SP/LP :560
G4-SEG :390
C866> PAL :47P
C868 SEG :68P
C871 PAL :68P
SEG-G2 :82P
SEG-G4 :75P
C872 PAL-SP :47P
PAL-SP/LP :0.01
SEG :0.01
C873 PAL-SP/LP :68P
SEG-G2 :82P
SEG-G4
TP851
PB ENVE
TP852
SWP
(SERVO/SYS BLK)
CS
SIN
SCLK
PIC.CTL
S/L/E
CK.DET
COMP OUT
HEAD CTL
1-HQ MD2
1-HQ MD1
P/S/N
NC.CTL
SP
C.SYNC
VP
NP
C.ROT
EE
TRIC
V.ENV DET
V.SWP
REC.S
S.DET
SEC/MES
NTSC
NT.TRIC
3.58REC
(SECAM)
EE
(POWER BLK)
IDL5V
V.GND
(RF, AUDIO BLK)
V.GND
IC602
MM1112
FL601
TZV-76C
SEG ONLY
*C653 (G2-SP/LP ONLY)
NTSC:10P
EXCEPT NTSC:15P
TR652 2SC1740S
TR653 DTA144EK
TR654 2SC1740S
TR656 DTC144ES
TR657 2SC1740S
TR658 DTC144ES
TR674 2SC2412K
TR672 IMX1
TR671 DTC144TK
TR608 DTA144EK
TR607 IMX1
TR614 DTC144ES
TR601 DTA114EK
TR612 DTA114ES
TR604 DTC144ES
TR615 DTC144ES
TR606 IMX1

*SP/LP: G2-EK, ES, EM, EM-K, EA, EDG
265EOH-Y1, 276EOH-Y1,
270EOH-E, 262EOH-Y2
277EOG
G4-OEM-ALL

*SP :EXCEPT SP/LP
*NTSC: EDG, ES, EM, EM-K

*G2-OEM: 3017CE, 1637NE, 4017NE, 6257NE
G4-OEM: 3047CE, 1837NE, 4047NE, 6457NE

MAIN (A) PCB: V1246A501A


246A501A
537NE, 4017NE, 6257NE
537NE, 404-7NE, 6457NE
IC601 NTSC:LA7440M EXCEPT NTSC :LA7447BM
IC761 LC7478JM-9648
IC751 LA7356
IC697 NTSC:LC8997BM EXCEPT NTSC:LC8997M
TR762 2SA933AS
TR761 2SA1037AK
TR603 2SC2412K
TR611 2SC2412K
TR719 DTA114EK
TR657 2SC1740S
X602 4.43MHz
X601 NTSC 3.58MHz EXCEPT NTSC 4.43MHz
X761 17.73MHz
P102 TUC-P07-81
TO SCART PCB P902
GND
N.C
N.C
GND
PB C
REC C
SECAM
PB ENVE
EE
Fsc
C.SYNC
SEG:BP1N EOG:EOH.G2-OEM:3P
PIC.CTL
I-HQ MD1
NC.CTL
VIDEO IN
C.SYNC
C.ROT
VIDEO OUT
TRICK
P/S/N
3.58REC
NTSC
SECAM
EE
TO MAIN PCB 3/4 (SERVO/SYS BLK)
VPS V IN
VIDEO IN
VIDEO OUT
TO MAIN PCB 2/4 (I/O BLK)
B (POWER SUPPLY) LINE
PB Y SIGNAL LINE
REC Y SIGNAL LINE
PB CHROMA SIGNAL LINE
REC CHROMA SIGNAL LINE
F
G
H
I
J
8
7
6
5
4
3
2
1

INDICATED VOLTAGES WERE MEASURED DURING PB MODE.
(TAPE USED:
PAL COLOUR BAR TAPE)
( ) :REC MODE
SE( ) :SECAM MODELS
NT( ) :NTSC MODELS

MAIN 4/4
VIDEO/PREAMP BLK
SCHEMATIC DIAGRAM
No.10-5 V124605M
A01

PRINCIPAL PARTS LOCATION

ICs

IC1	H6
IC2	H5
IC201	B4
IC301	C6
IC401	E2
IC402	D2
IC404	C4
IC405	G1
IC406	B1
IC407	F1
IC408	G1
IC601	F4,5
IC602	E4
IC697	G5,6
IC751	F6
IC761	G5
IC851	F5

TRANSISTORs

TR1	G6
TR2	H6
TR3	H6
TR4	G6
TR5	H3
TR6	H5
TR7	H3
TR8	H4
TR9	H3
TR10	H3
TR11	H3
TR12	H2
TR13	H2
TR50	H4
TR51	H4
TR52	H4
TR53	H3
TR54	H3
TR55	H4
TR201	A5
TR202	A5
TR203	B4
TR204	B4
TR205	B5
TR207	A2
TR208	A2
TR210	A2
TR211	A2
TR212	A2
TR213	A3
TR214	B3
TR216	A3
TR217	A5
TR301	C6
TR302	C6
TR303	C6
TR305	D6
TR306	D6
TR307	D6
TR308	C6
TR331	C6
TR332	D5
TR333	C6
TR401	B3,4
TR402	G,H3,4
TR403	F2
TR404	D3
TR405	C4
TR406	C4
TR407	C5
TR408	E1
TR409	C5
TR601	F4
TR603	F5
TR604	F5
TR606	F4
TR607	F4
TR608	F4
TR611	F5
TR612	F5
TR614	F4
TR615	F4,5
TR652	F5
TR653	D5
TR654	D5
TR656	D5
TR657	D5
TR658	D5
TR671	G3
TR672	G4
TR674	G4
TR719	D4
TR761	G5
TR762	G5

CONNECTORs

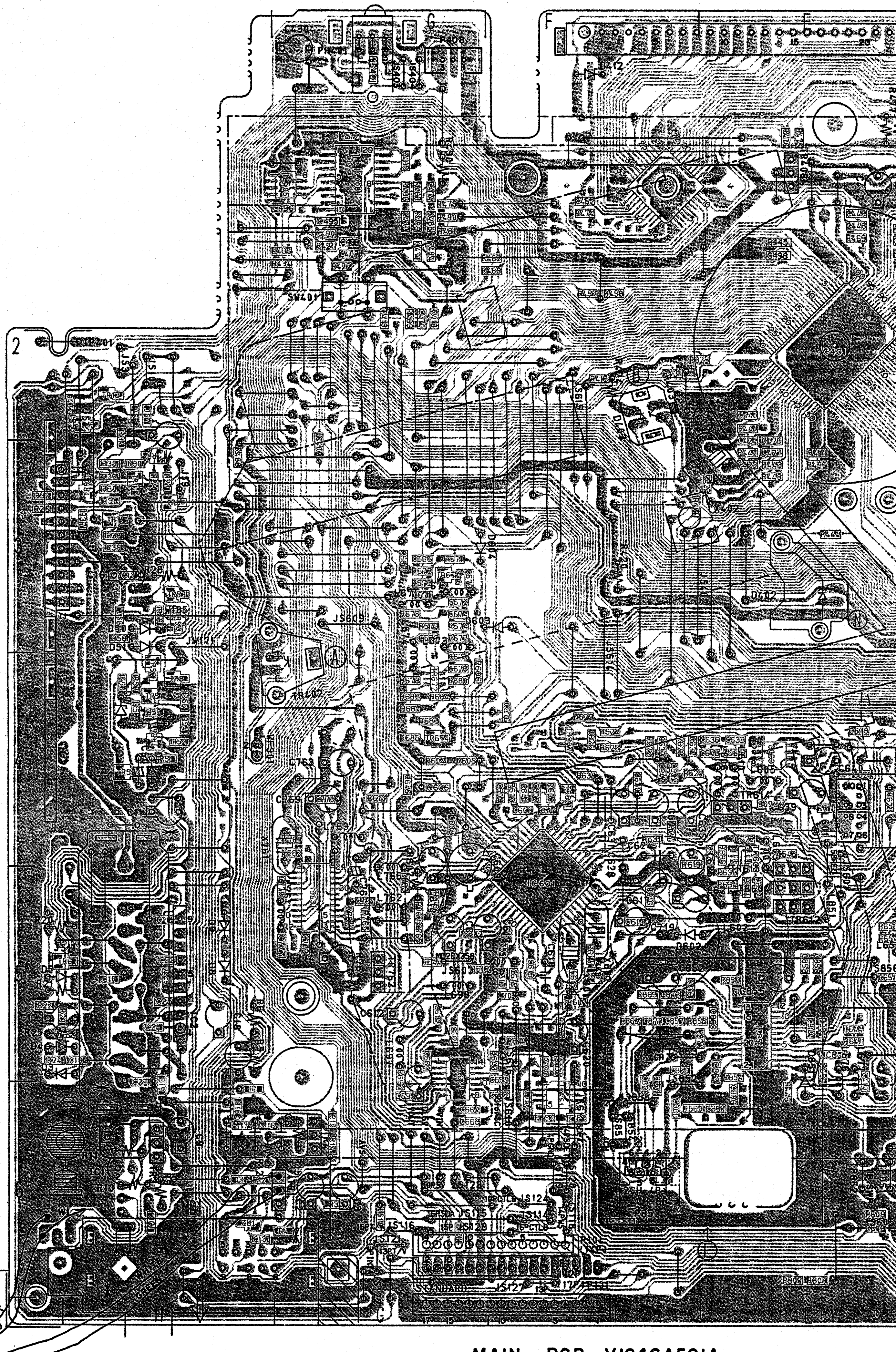
P101	F,G6
P102	D6
P201	B6
P401	C3
P402	B2
P405	C5,6
P406	A1
P852	F6

WIREs

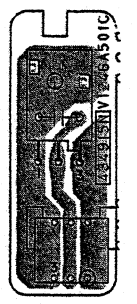
WF301	H4
WF302	D6

TEST POINTs

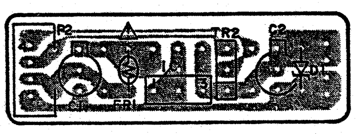
TP401	H2
TP851	E6
TP852	E6


2
BLACK
RED
4
3
2
1
TO REG-EK PCB P2 (EK ONLY)

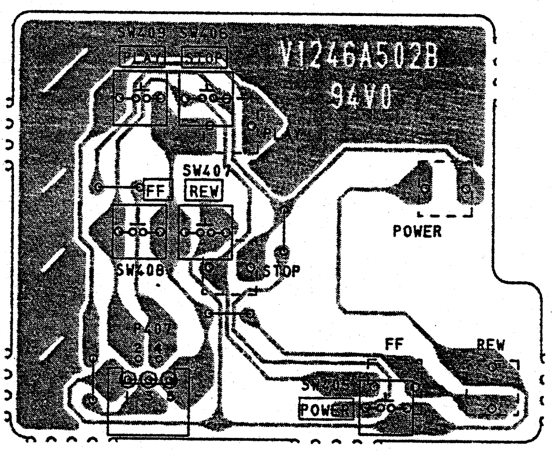
MAIN PCB VI246A501A


VI246A501C

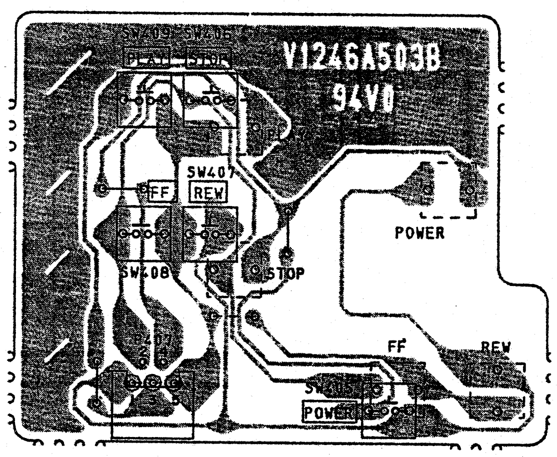
RC SENSOR PCB
VI246A501C



REG-EK PCB
VI246A5100

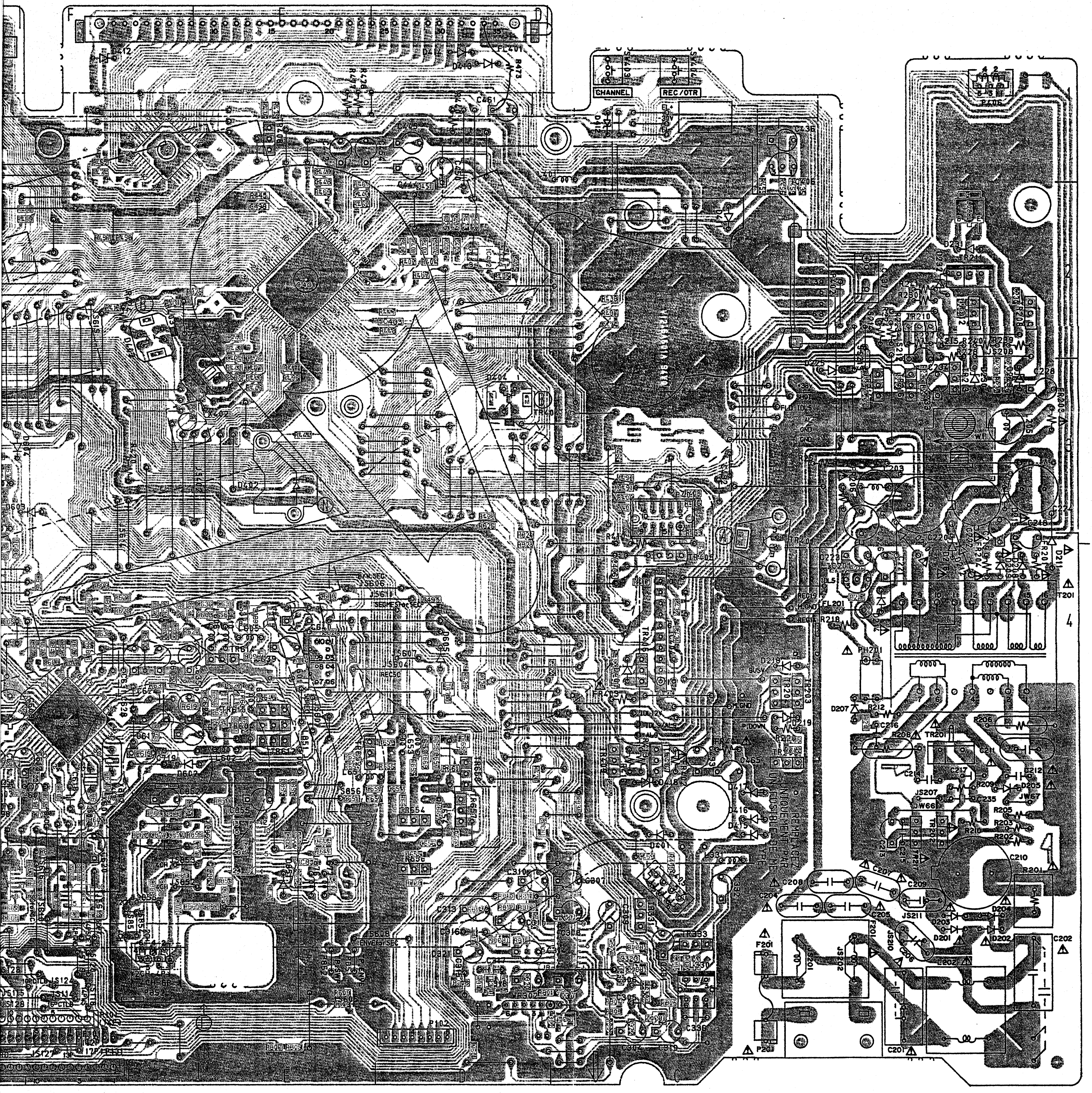

VI246A502B
94V0
SW407
FF
REW
SW408
STOP
POWER
FF
REW
POWER

OPERATION PCB VI246A502B


VI246A503B
94V0
SW407
FF
REW
SW408
STOP
POWER
FF
REW
POWER

OPERATION PCB VI246A503B

OI
VI

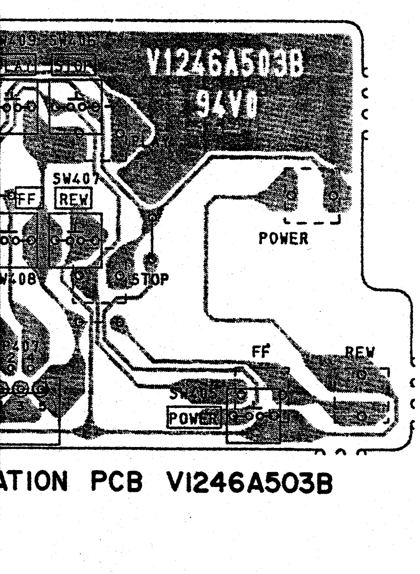

CHANNEL
REC/OTR
SW403
SW404
P406
D412
R473
C461
D416
IC403
TR410
D219
D220
BUSY
DOWN
D207
R212
R218
PH201
FL201
TR201
C216
C217
C211
JS207
JW66
JW67
D205
R205
R209
R210
C210
C206
C207
C208
C204
C205
JS211
JS210
JS202
D201
D202
D204
R201
C202
C201
F201
P201
T201
4
D416
D417
D415
D401
C310
C336
TR393
C313
C321
S608
ENVELOP SEC
S606
SEGMENT SEC
S607
S604
C601
D602
D603
IC601
JS124
JS127
JS128
P102
S654
S656

MAIN PCB VI246A501A

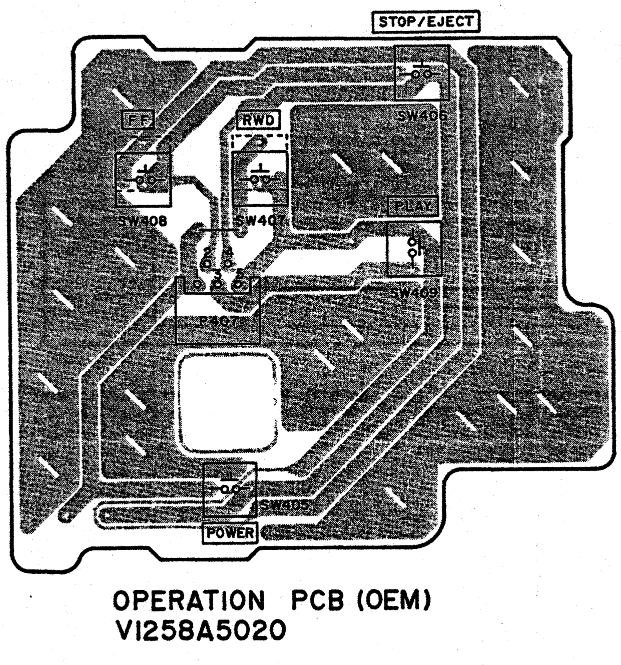
WARNING: ⚠INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: ⚠IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

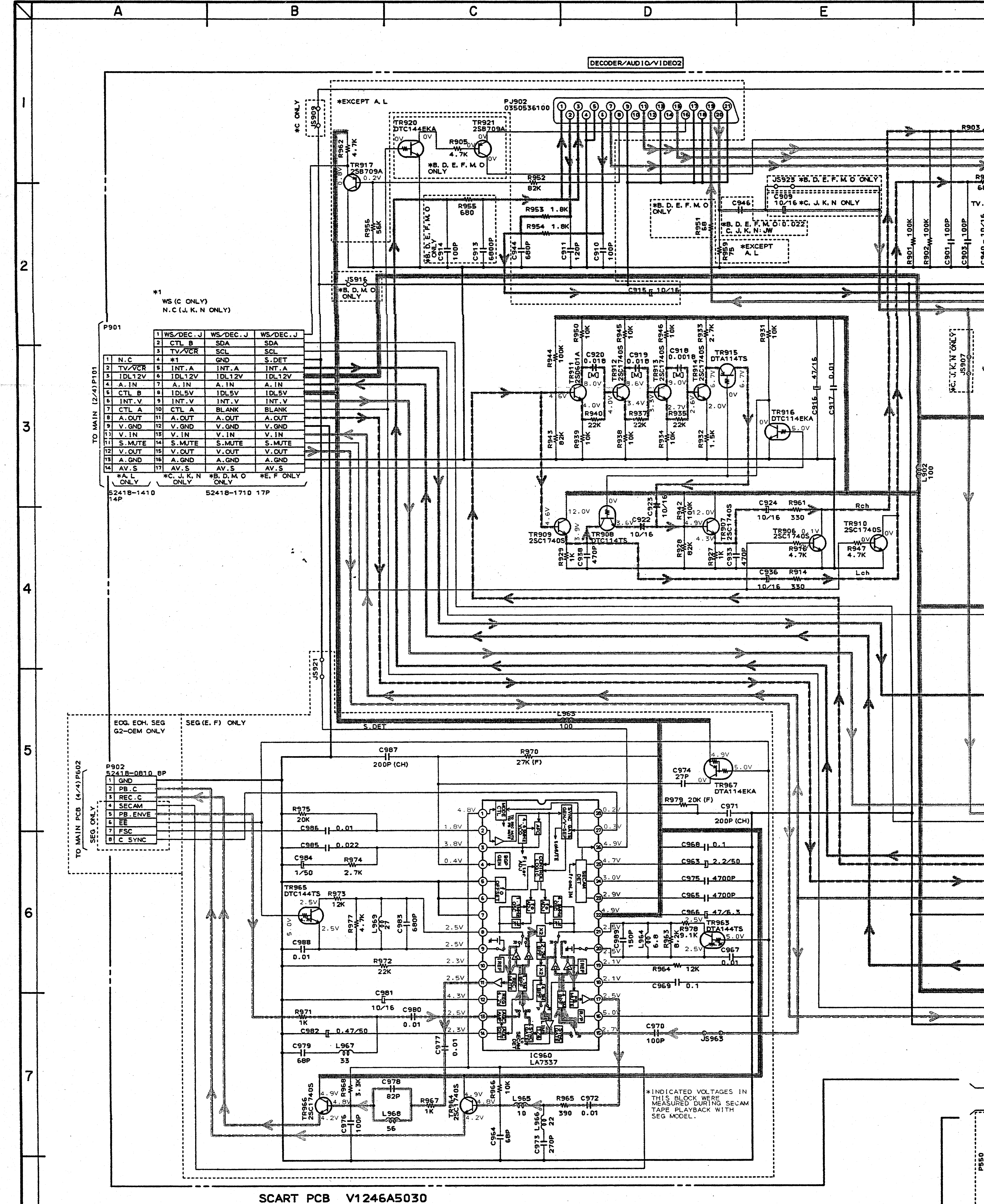
NOTE: PARTS DIFFER DEPENDING ON MODEL NUMBER. REFER TO SCHEMATIC DIAGRAMS FOR PERTINENT PARTS INFORMATION.


VI246A503B
94V0
SW40
FF
REW
POWER
STOP
FF
REW
POWER

ATION PCB VI246A503B


STOP/EJECT
FF
RWD
SW408
SW409
SW40
PLAY
POWER

OPERATION PCB (OEM)
VI258A5020


A
B
C
D
E
1
2
3
4
5
6
7
DECODER/AUDIO/VIDEO2
*C ONLY
JS909
*EXCEPT A, L
PJ902
0350536100
TR920
DTC144EKA
TR921
2SB709A
R905 4.7K
*B, D, E, F, M, O ONLY
R962 4.7K
TR917
2SB709A
0.8V
0.2V
R956 56K
R952 82K
R955 680
R953 1.8K
R954 1.8K
C914 100P
C913 6800P
C944 680P
C911 120P
C910 100P
*B, D, E, F, M, O ONLY
C946
R951 68
R959 75
*EXCEPT A, L
JS925 *B, D, E, F, M, O ONLY
C909 10/16 *C, J, K, N ONLY
*B, D, E, F, M, O: 0.022
C, J, K, N: JW
R903
R901 100K
R902 100K
C901 100P
C903 100P
JS916
*B, D, M, O ONLY
C915 10/16
*1
WS (C ONLY)
N.C (J, K, N ONLY)
P901
TO MAIN (2/4) P101
1 N.C
2 TV/VCR
3 IDL12V
4 A.IN
5 CTL B
6 INT.V
7 CTL A
8 A.OUT
9 V.GND
10 V.IN
11 S.MUTE
12 V.OUT
13 A.GND
14 AV.S
*A, L ONLY
52418-1410 14P
1 WS/DEC.J
2 CTL B
3 TV/VCR
4 *1
5 INT.A
6 IDL12V
7 A.IN
8 IDL5V
9 INT.V
10 CTL A
11 A.OUT
12 V.GND
13 V.IN
14 S.MUTE
15 V.OUT
16 A.GND
17 AV.S
*C, J, K, N ONLY
WS/DEC.J
SDA
SCL
GND
INT.A
IDL12V
A.IN
IDL5V
INT.V
BLANK
A.OUT
V.GND
V.IN
S.MUTE
V.OUT
A.GND
AV.S
*B, D, M, O ONLY
WS/DEC.J
SDA
SCL
S.DET
INT.A
IDL12V
A.IN
IDL5V
INT.V
BLANK
A.OUT
V.GND
V.IN
S.MUTE
V.OUT
A.GND
AV.S
*E, F ONLY
52418-1710 17P
R944 100K
R950 10K
R945 10K
R946 10K
R933 2.7K
R931 10K
TR911 2SD601A
C920 0.018
TR912 2SC1740S
C919 0.018
TR913 2SC1740S
C918 0.0018
TR914 2SC1740S
TR915 DTA114TS
[M]
R940 22K
R937 22K
R935 22K
R943 82K
R939 10K
R938 10K
R934 10K
R932 1.5K
C916 47/16
C917 0.01
TR916 DTC114EKA
L902 100
TR909 2SC1740S
TR908 DTC114TS
C922 10/16
C923 10/16
R942 100K
TR907 2SC1740S
C924 10/16
R961 330
Rch
TR906 2SC1740S
R948 4.7K
TR910 2SC1740S
R947 4.7K
R929 1K
C938 470P
R928 82K
R927 1K
C933 470P
C936 10/16
R914 330
Lch
JS907
*C, J, K, N ONLY
JS921
EOG, EOH, SEG G2-OEM ONLY
SEG (E, F) ONLY
TO MAIN PCB (4/4) P602
SEG ONLY
P902
52418-0810 8P
1 GND
2 PB.C
3 REC.C
4 SECAM
5 PB.ENVE
6 EE
7 FSC
8 C SYNC
S.DET
L963 100
C987 200P (CH)
R970 27K (F)
C974 27P
TR967 DTA114EKA
R979 20K (F)
C971 200P (CH)
R975 20K
C986 0.01
C985 0.022
C984 1/50
R974 2.7K
TR965 DTC144TS
R973 12K
R977 4.7K
L969 27
C983 680P
C988 0.01
R972 22K
C981 10/16
R971 1K
C980 0.01
C982 0.47/50
C979 68P
L967 33
C977 0.01
IC960
LA7337
C968 0.1
C963 2.2/50
C975 4700P
C965 4700P
C966 47/6.3
C989 150P
L964 6.8
R963 8.2K
R978 9.1K
TR963 DTA144TS
C967 0.01
R964 12K
C969 0.1
C970 100P
JS963
TR966 2SC1740S
R968 3.3K
C978 82P
L968 56
C976 100P
R967 1K
TR964 2SC1740S
R966 10K
L965 10
C964 68P
L966 22
C973 270P
R965 390
C972 0.01
P550
FRON
14

*INDICATED VOLTAGES IN THIS BLOCK WERE MEASURED DURING SECAM TAPE PLAYBACK WITH SEG MODEL.

SCART PCB V1246A5030

AV1
*A: G260, 460EDG

DEC WITH FRONT
*B: G265, 465EDG

AV1/2 WITHOUT FRONT+16:9
*C: G271, 470EK

DEC WITHOUT FRONT
*D: G262EOH-Y2
G267EOG
G465EOH-Y1

SEG WITHOUT FRONT
*E: G260, 265, 460, 465SEG

SEG WITH FRONT
*F: G270, 470SEG

AV1/2 WITH FRONT
*J: G270EOH-E

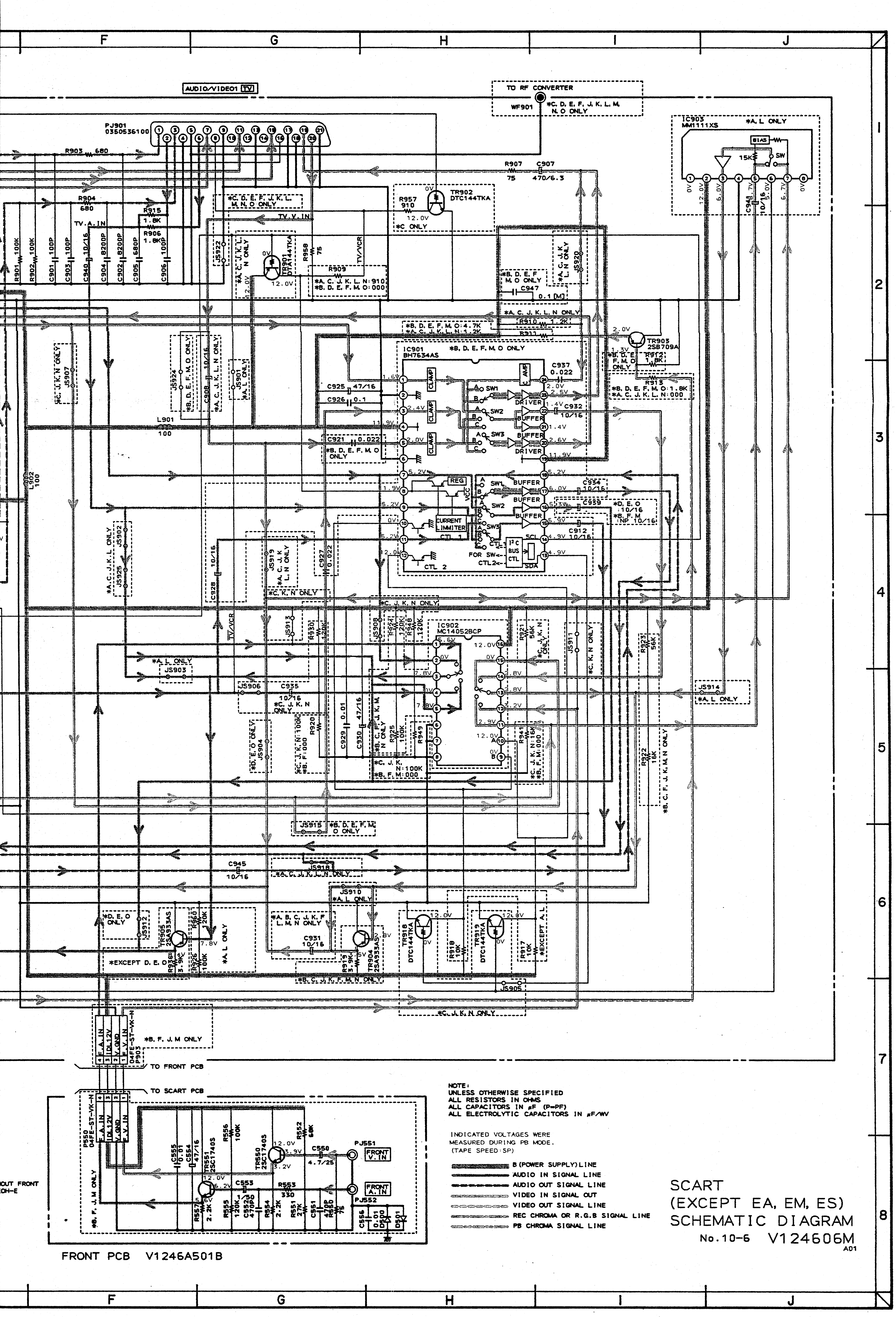
AV1/2 WITHOUT FRONT
*K: G263EOH-E

AV1
*L: G260, 270EK
G260, 261EOH-Y1

DEC WITH FRONT
*M: G265, 275, 276EOH-Y1
G267EOH-Y2
G277EOG
G467EOH-Y2
G475EOH-E/Y1
G477EDG

AV1/2 WITHOUT FRONT
*N: VCR3017CE
VCR1637NE
VCR4017NE
VCR6257NE

DEC WITHOUT FRONT
*O: VCR3047CE
VCR1837NE
VCR4047NE
VCR6457NE


AUDIO/VIDEO1 TV
PJ901
0350536100
TO RF CONVERTER
WF901
*C, D, E, F, J, K, L, M, N, O ONLY
IC903
MM1111XS
*A, L ONLY
BIAS
15K
SW
IC901
BH7634AS
*B, D, E, F, M, O ONLY
CLAMP
C AMP
DRIVER
BUFFER
REG
CURRENT LIMMITER
CTL 1
CTL 2
I²C BUS CTL
SDA
SCL
FOR SW←
CTL2←
IC902
MC14052BCP
TR901
DTA144TKA
TR902
DTC144TKA
TR903
2SB709A
TR904
2SA933AS
TR905
2SA933AS
TR918
DTC144TKA
TR919
DTC144TKA
TR550
2SC1740S
TR551
2SC1740S
TV.A.IN
TV.V.IN
TV/VCR
L901
100
L902
100
P903
04FE-ST-VK-N
P550
04FE-ST-VK-N
F.A.IN
IDL12V
V.GND
F.V.IN
TO FRONT PCB
TO SCART PCB
*B, F, J, M ONLY
PJ551
FRONT V.IN
PJ552
FRONT A.IN
D501
OUT FRONT
FRONT PCB V1246A501B

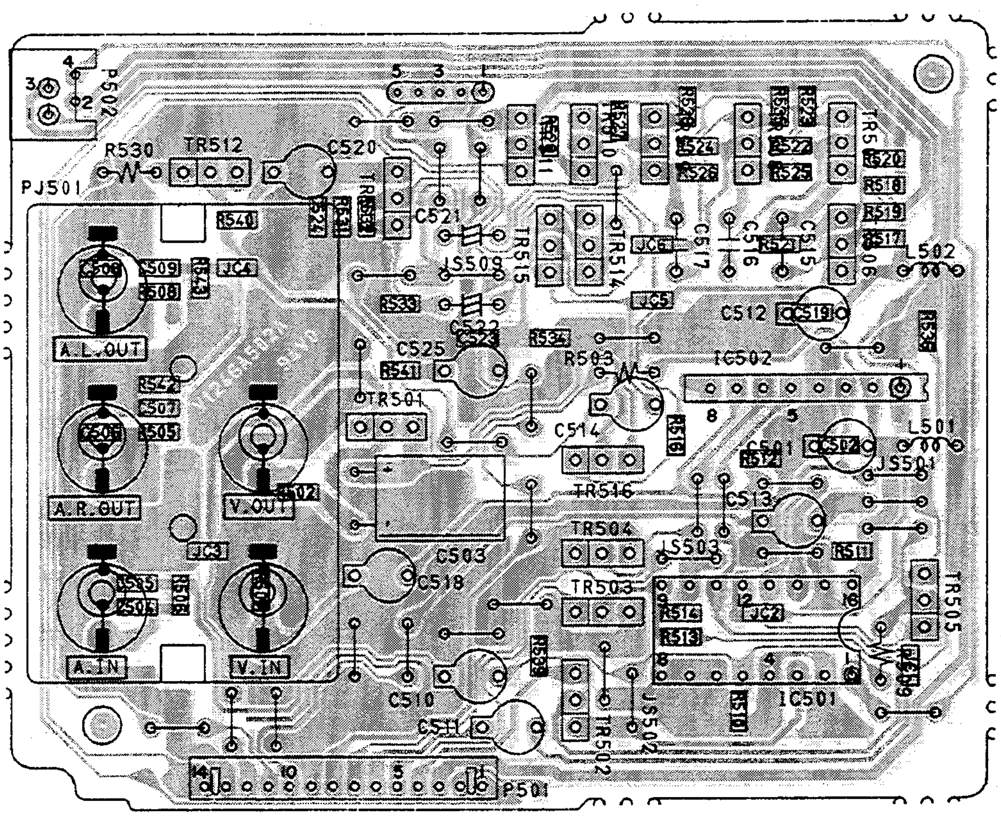
NOTE:
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS
ALL CAPACITORS IN µF (P=PF)
ALL ELECTROLYTIC CAPACITORS IN µF/WV

INDICATED VOLTAGES WERE
MEASURED DURING PB MODE.
(TAPE SPEED:SP)

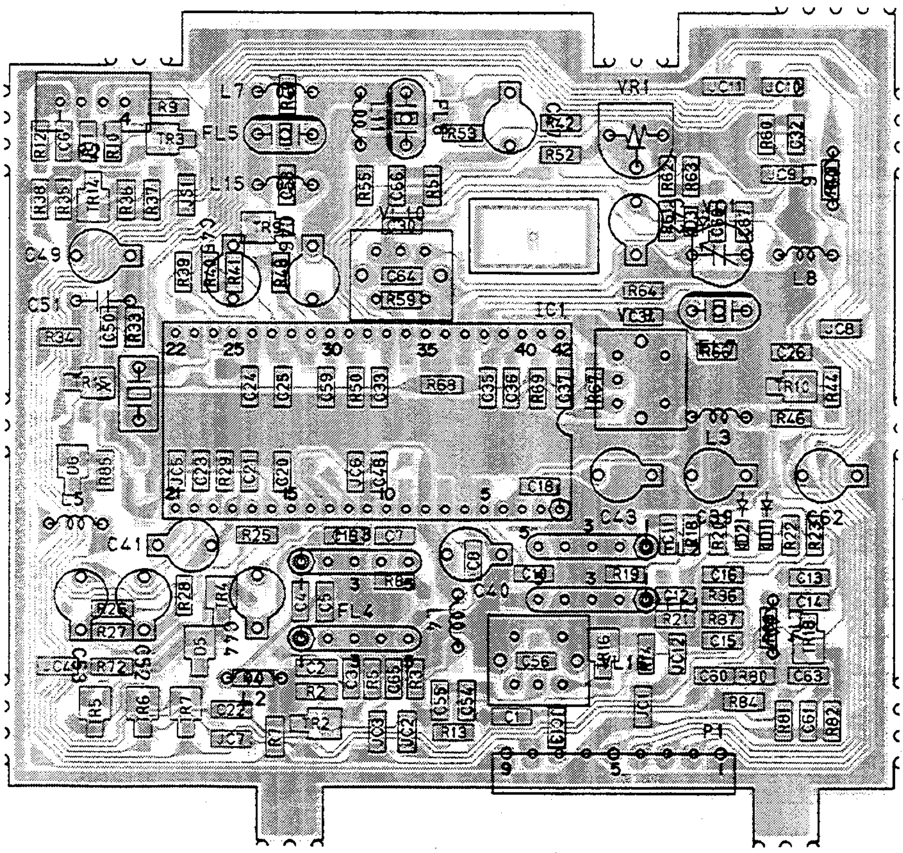
B (POWER SUPPLY) LINE
AUDIO IN SIGNAL LINE
AUDIO OUT SIGNAL LINE
VIDEO IN SIGNAL OUT
VIDEO OUT SIGNAL LINE
REC CHROMA OR R.G.B SIGNAL LINE
PB CHROMA SIGNAL LINE

SCART
(EXCEPT EA, EM, ES)
SCHEMATIC DIAGRAM

No.10-6 V124606M
A01


P502
4
3
2
1
5
3
1
R530
TR512
C520
PJ501
R540
R531
C521
TR515
JS509
TR514
JC6
C517
C516
C515
R521
TR506
L502
R524
R526
R522
R525
R523
TR5
R520
R518
R519
R517
C508
C509
R508
R543
JC4
R533
C522
C523
C525
R534
R541
R503
IC502
8
5
C512
C519
R535
A.L.OUT
R542
C507
C505
R505
TR501
C514
R516
C501
C502
R512
L501
JS501
A.R.OUT
V.OUT
R502
TR516
C513
TR504
JS503
R511
JC3
C503
C518
TR503
R535
C504
R506
R514
R513
JC2
12
16
8
4
1
TR505
R509
A.IN
V.IN
C510
C511
R539
TR502
JS502
R510
IC501
14
10
5
1
P501
JC5

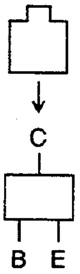
RCA PCB VI246A502A

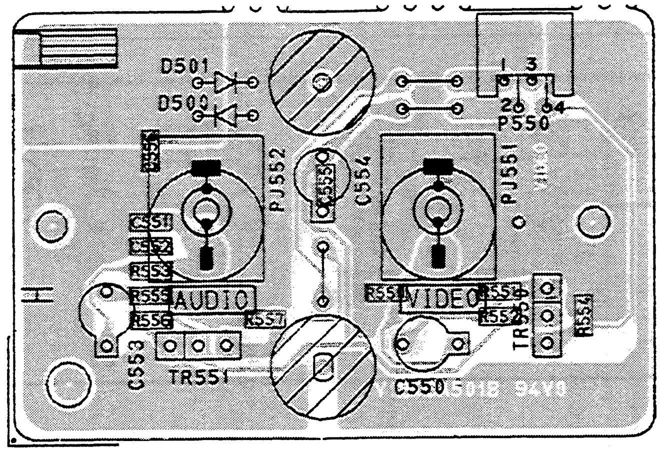

VR1
L7
FL5
TR3
L15
IC1
L8
L3
C43
C41
L5
FL4
C40
P1
C49
C51
C56
R9
R53
R42
R52
R64
R59
C64
R34
R25
R27
R72
C22
R2
R13
C1
R84
C60
C63
C15
C16
C13
C14
R86
R87
C26
R46
C62
C8
C11
C10
C9
22
25
30
35
40
42
15
10
5
3
9
1

VIF-SEG PCB F5001A5020

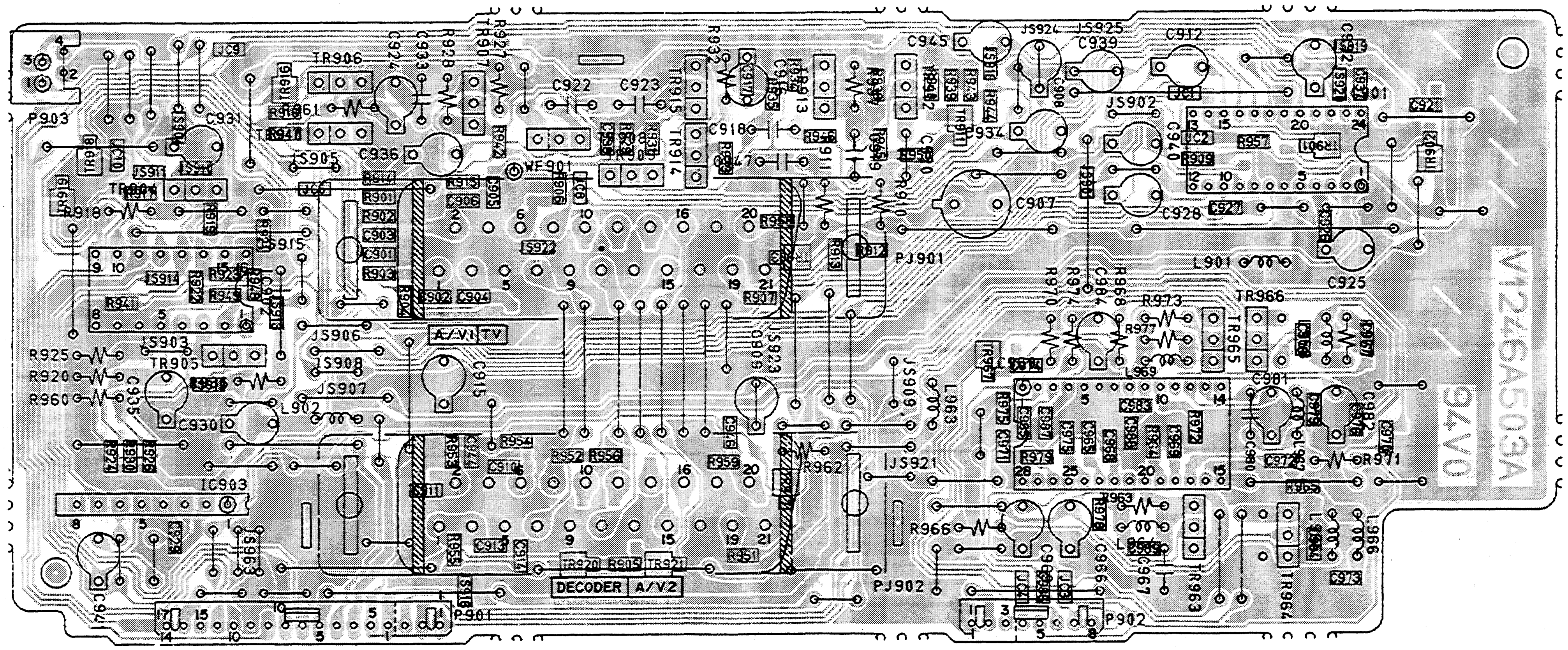
NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER.
REFER TO SCHEMATIC DIAGRAMS FOR PERTINENT
PARTS INFORMATION.

SINGLE CHIP
TRANSISTOR

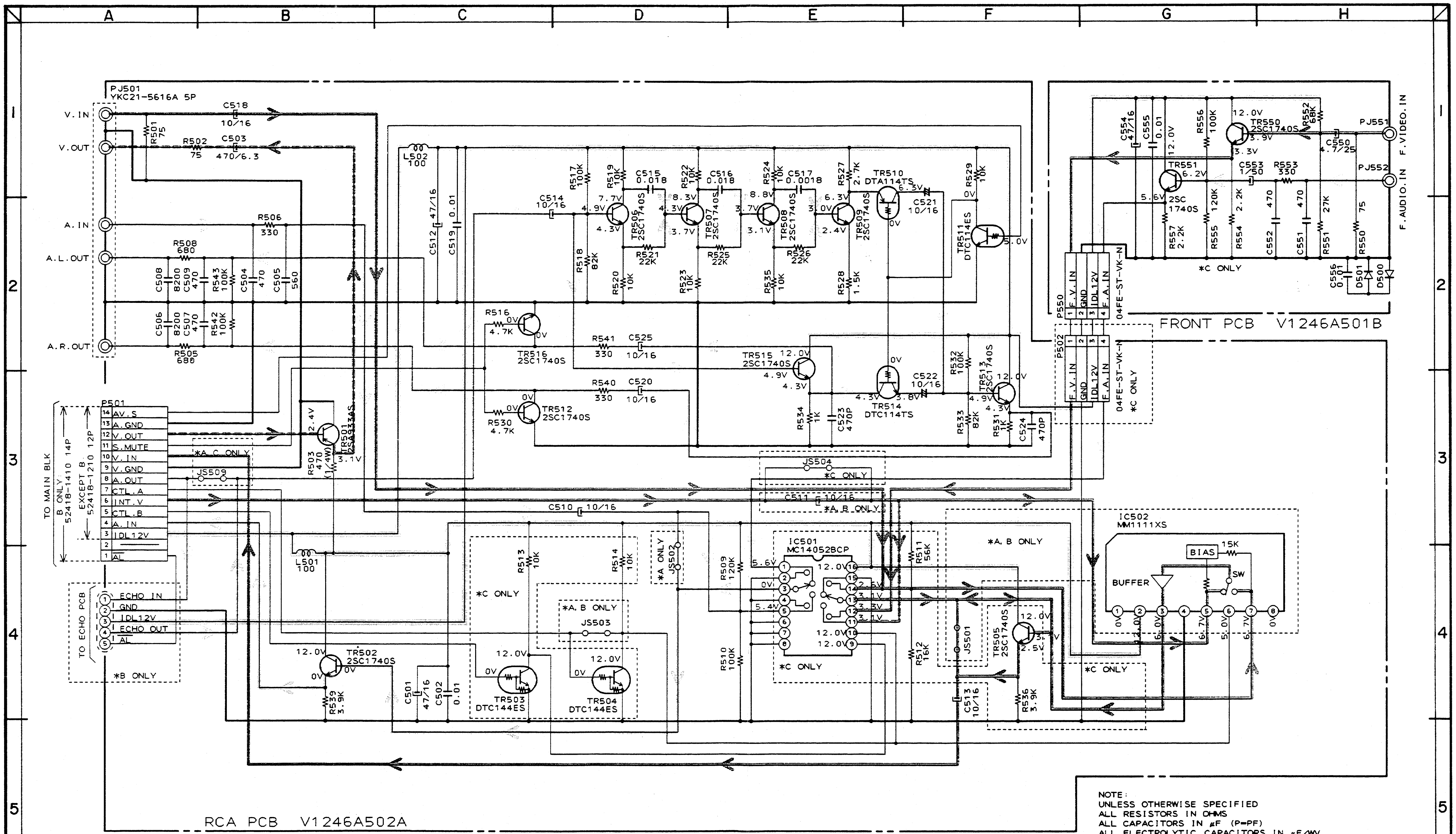



D501
D500
PJ552
C554
PJ551
P550
AUDIO
VIDEO
TR551
C553
C550

FRONT PCB V1246A501B


P903
TR906
IC903
P901
PJ901
PJ902
P902
L901
L902
A/V1
TV
DECODER
A/V2
V1246A503A
94V0

SCART PCB V1246A503A


PJ501
YKC21-5616A 5P
V.IN
V.OUT
A.IN
A.L.OUT
A.R.OUT
C518 10/16
R501 75
R502 75
C503 470/6.3
R506 330
R508 680
R505 680
C508 8200
C509 470
R543 100K
C504 470
C505 560
C506 8200
C507 470
R542 100K
L502 100
C512 47/16
C519 0.01
C514 10/16
R517 100K
R519 10K
C515 0.018
R522 10K
C516 0.018
R524 10K
C517 0.0018
R527 2.7K
TR510 DTA114TS
C521 10/16
R529 10K
TR506 2SC1740S
TR507 2SC1740S
TR508 2SC1740S
TR509 2SC1740S
TR511 DTC114ES
R518 82K
R520 10K
R521 22K
R523 10K
R525 22K
R535 10K
R526 22K
R528 1.5K
R516 4.7K
TR516 2SC1740S
R541 330
C525 10/16
R540 330
C520 10/16
TR512 2SC1740S
R530 4.7K
TR515 2SC1740S
TR514 DTC114TS
C522 10/16
R532 100K
TR513 2SC1740S
R534 1K
C523 470P
R533 82K
R531 1K
C524 470P
P501
14 AV.S
13 A.GND
12 V.OUT
11 S.MUTE
10 V.IN
9 V.GND
8 A.OUT
7 CTL.A
6 INT.V
5 CTL.B
4 A.IN
3 IDL12V
2
1 AL
TO MAIN BLK
B ONLY 52418-1410 14P
EXCEPT B 52418-1210 12P
TR501 2SA933AS
R503 470 (1/4W)
*A.C ONLY
JS509
L501 100
C510 10/16
TO ECHO PCB
1 ECHO IN
2 GND
3 IDL12V
4 ECHO OUT
5 AL
*B ONLY
TR502 2SC1740S
R539 3.9K
C501 47/16
C502 0.01
*C ONLY
R513 10K
R514 10K
*A.B ONLY
JS503
TR503 DTC144ES
TR504 DTC144ES
*A ONLY
JS502
JS504
*C ONLY
C511 10/16
*A.B ONLY
R509 120K
R510 100K
IC501 MC14052BCP
R511 56K
R512 16K
JS501
*A.B ONLY
TR505 2SC1740S
C513 10/16
R536 3.9K
*C ONLY
IC502 MM1111XS
BIAS
15K
BUFFER
SW
P550
P502
1 F.V.IN
2 GND
3 IDL12V
4 F.A.IN
04FE-ST-VK-N
*C ONLY
FRONT PCB V1246A501B
C554 47/16
C555 0.01
R556 100K
TR550 2SC1740S
R552 68K
C550 4.7/25
PJ551
F.VIDEO.IN
TR551 2SC1740S
C553 1/50
R553 330
PJ552
F.AUDIO.IN
R557 2.2K
R555 120K
R554 2.2K
C552 470
C551 470
R551 27K
R550 75
C556 0.01
D501
D500
*C ONLY
RCA PCB V1246A502A

NOTE:
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS
ALL CAPACITORS IN µF (P=PF)
ALL ELECTROLYTIC CAPACITORS IN µF/WV

RCA WITHOUT FRONT
*A: G260, 265EA
G260ES
G260, 265EM

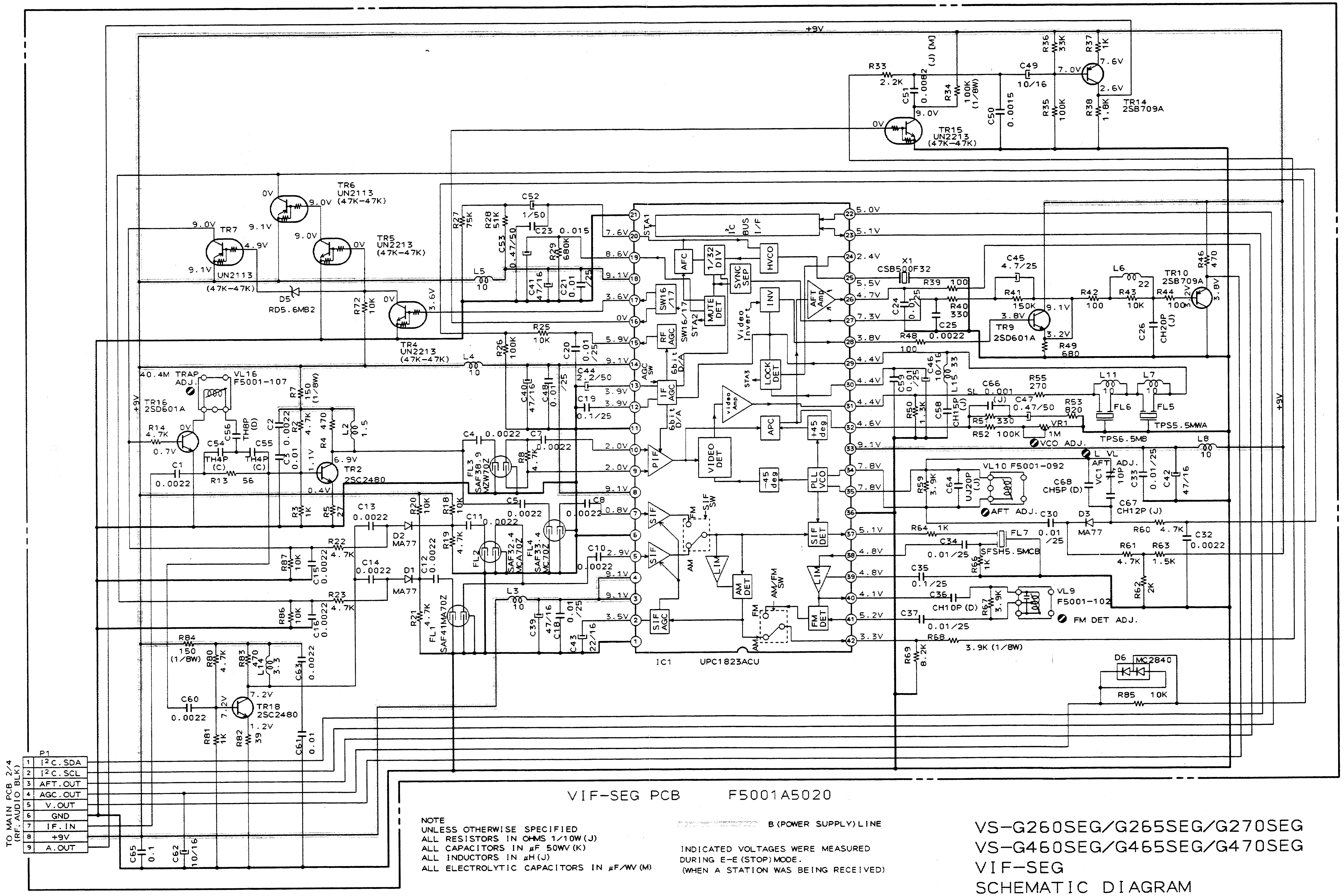
*B: G270EM-K

RCA WITH FRONT
*C: G460, 465EA
G460EM

INDICATED VOLTAGES WERE
MEASURED DURING PB MODE.

B (POWER SUPPLY) LINE
AUDIO IN SIGNAL LINE
AUDIO OUT SIGNAL LINE
VIDEO IN SIGNAL LINE
VIDEO OUT SIGNAL LINE

RCA
(EA, EM, ES ONLY)
SCHEMATIC DIAGRAM
No.10-7 V124607M
A01


+9V
R33 2.2K
C51 0.0082 (J) [M]
9.0V
R34 100K (1/8W)
C50 0.0015
C49 10/16
7.0V
R35 100K
R36 33K
R37 1K
7.6V
2.6V
R38 1.8K
TR14 2SB709A
0V
TR15 UN2213 (47K-47K)
TR6 UN2113 (47K-47K)
0V
9.0V
TR7 UN2113 (47K-47K)
9.0V 9.1V 4.9V 9.1V
TR5 UN2213 (47K-47K)
D5 RD5.6MB2
R72 10K
TR4 UN2213 (47K-47K)
3.6V
C52 1/50
R27 75K
R28 51K
C23 0.015
C53 0.47/50
R29 680K
C41 47/16
C21 0.01 /25
L5 10
R25 10K
R26 100K
C20 0.01 /25
L4 10
C40 47/16
C48 0.01 /25
C44 2.2/50
C19 0.1/25
40.4M TRAP ADJ.
VL16 F5001-107
+9V
TR16 2SD601A
R14 4.7K
0.7V
C56 TH8P (D)
C54 TH4P (C)
C55 TH4P (C)
C2 0.0022
C3 0.01
R7 150 (1/8W)
R2 4.7K
R4 470
L2 1.5
6.9V
1.1V
TR2 2SC2480
C1 0.0022
R13 56
0.4V
R3 1K
R5 27
C4 0.0022
C7 0.0022
R8 4.7K
FL3 SAF38.9 MZW70Z
C5 0.0022
C8 0.0022
C13 0.0022
D2 MA77
R20 10K
R18 10K
C11 0.0022
R19 4.7K
C12 0.0022
FL2 SAF32.4 MCA70Z
FL4 SAF33.4 MC70Z
C10 0.0022
R22 4.7K
R87 10K
C15 0.0022
C14 0.0022
D1 MA77
R23 4.7K
R86 10K
C16 0.0022
R21 4.7K
FL1 SAF41MA70Z
L3 10
C39 47/16
C18 0.01 /25
C43 22/16
R84 150 (1/8W)
R80 4.7K
R83 470
L14 3.3
C63 0.0022
C60 0.0022
7.2V 7.2V
TR18 2SC2480
1.2V
R81 1K
R82 39
C61 0.01
5.0V 5.1V 2.4V 5.5V 4.7V 7.3V 3.8V 4.4V 4.4V 4.4V 4.6V 9.1V 7.8V 7.8V 5.1V 4.8V 4.8V 4.1V 5.2V 3.3V
7.6V 8.6V 9.1V 3.6V 0V 5.9V 9.1V 3.9V 3.9V 2.0V 2.0V 9.1V 0.8V 2.9V 9.1V 9.1V 3.5V
STA1
I²C BUS I/F
AFC
1/32 DIV
HVCO
SYNC SEP
MUTE DET
SW16/17 STA2
SW16 /17
INV
AFT Amp
RF AGC
AGC SW
6bit D/A
IF AGC
6bit D/A
Video Invert
STA3
LOCK DET
Video Amp
APC
+45 deg
VIDEO DET
PIF
-45 deg
PLL VCO
SIF
SIF
FM
SIF SW
AM
LIM
AM DET
AM/FM SW
SIF DET
LIM
FM DET
SIF AGC
FM AM
IC1 UPC1823ACU
X1 CSB500F32
R39 100
C24 0.01 /25
R40 330
C25
R48 0.0022
100
C45 4.7/25
R41 150K
3.8V
9.1V
TR9 2SD601A
3.2V
R49 680
L6 22
R42 100
R43 10K
R44 100
C26 CH20P (J)
TR10 2SB709A
2V
3.8V
R46 470
C59 0.01 /25
C46 10/16
L15 33
C58 CH15P (J)
R50 1.3K
C66 SL 0.001 (J)
R55 270
C47 0.47/50
R5 330
R53 820
VR1 1M
R52 100K
VCO ADJ.
L11 10
L7 10
FL6 TPS6.5MB
FL5 TPS5.5MWA
+9V
L8 10
VL10 F5001-092
R59 3.9K
C64 UJ20P (J)
C68 CH5P (D)
AFT ADJ.
VC1 10P
C33 0.01/25
C42 47/16
C67 CH12P (J)
AFT ADJ.
C30 0.01 /25
D3 MA77
R64 1K
FL7 SFSH5.5MCB
C34 0.01/25
R60 4.7K
C32 0.0022
R61 4.7K
R63 1.5K
R66 1K
C35 0.1/25
R62 2K
C36 CH10P (D)
R67 3.9K
VL9 F5001-102
FM DET ADJ.
C37 0.01/25
R68 3.9K (1/8W)
R69 8.2K
D6 MC2840
R85 10K
P1
1 I²C.SDA
2 I²C.SCL
3 AFT.OUT
4 AGC.OUT
5 V.OUT
6 GND
7 IF.IN
8 +9V
9 A.OUT
TO MAIN PCB 2/4 (RF. AUDIO BLK)
C65 0.1
C62 10/16

VIF-SEG PCB F5001A5020

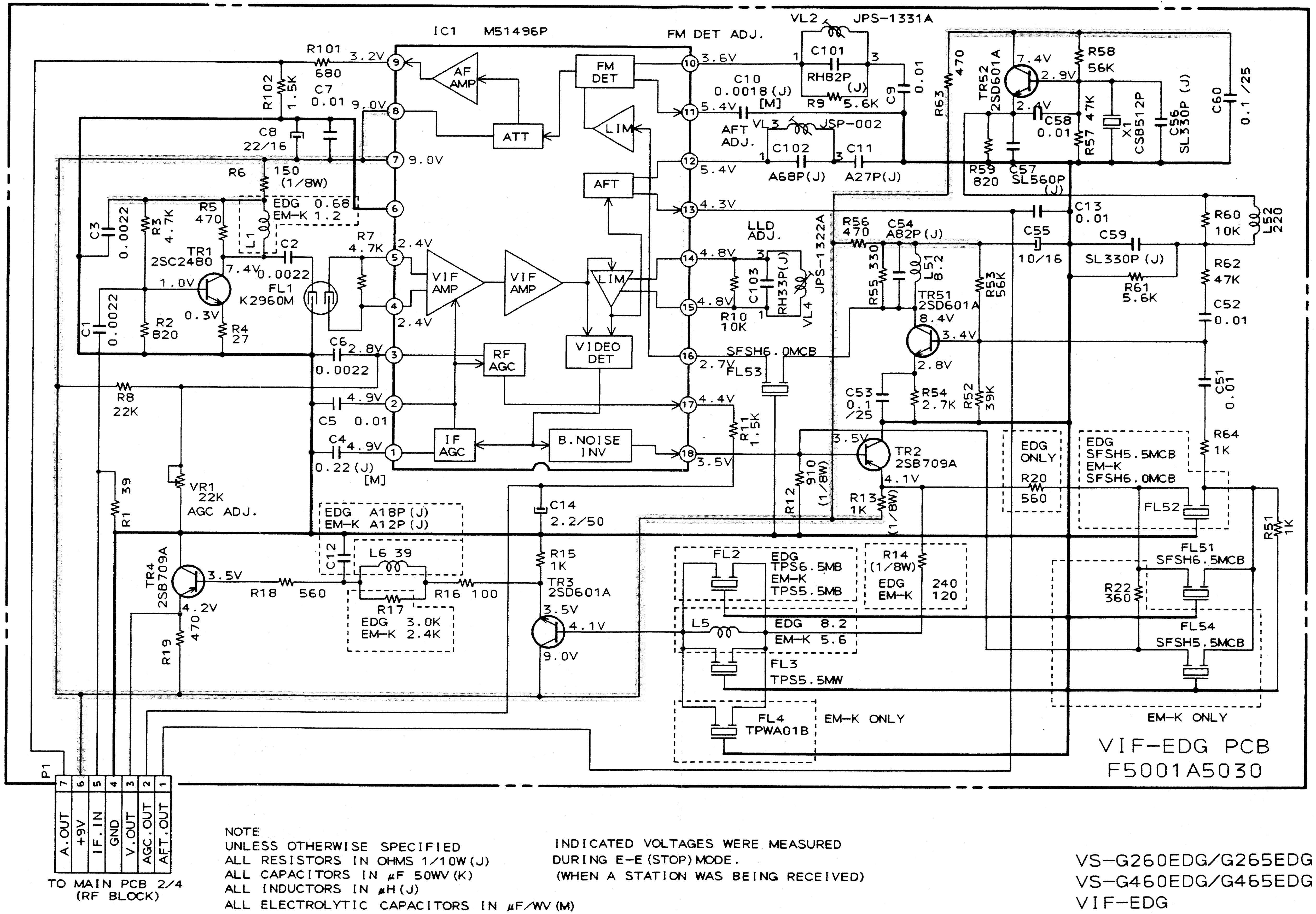
NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/10W (J)
ALL CAPACITORS IN μF 50WV (K)
ALL INDUCTORS IN μH (J)
ALL ELECTROLYTIC CAPACITORS IN μF/WV (M)

B (POWER SUPPLY) LINE

INDICATED VOLTAGES WERE MEASURED
DURING E-E (STOP) MODE.
(WHEN A STATION WAS BEING RECEIVED)

VS-G260SEG/G265SEG/G270SEG
VS-G460SEG/G465SEG/G470SEG
VIF-SEG
SCHEMATIC DIAGRAM

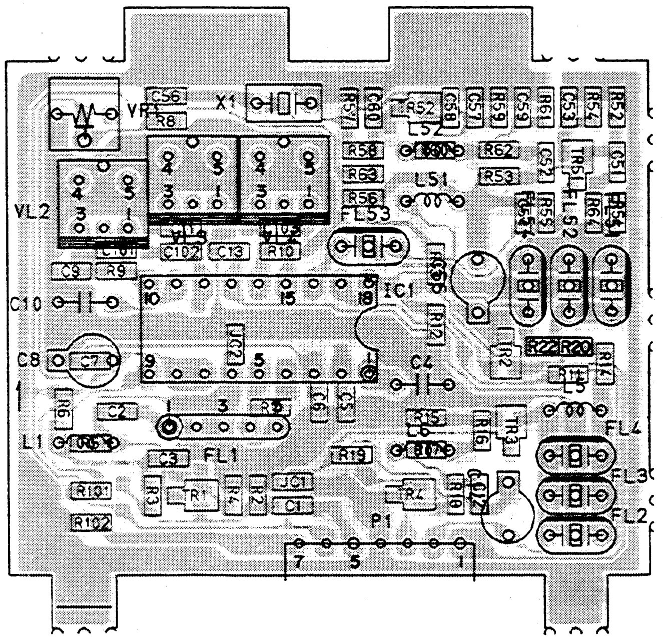
No.10-8 V124608M
A2


IC1 M51496P
AF AMP
ATT
FM DET
LIM
AFT
VIF AMP
VIF AMP
LIM
VIDEO DET
RF AGC
IF AGC
B.NOISE INV
FM DET ADJ.
VL2 JPS-1331A
C101 RH82P (J)
R9 5.6K
C9 0.01
C10 0.0018 (J) [M]
AFT ADJ.
VL3 JSP-002
C102 A68P(J)
C11 A27P(J)
LLD ADJ.
JPS-1322A
C103 RH33P(J)
VL4
R10 10K
SFSH6.0MCB
FL53
R11 1.5K
R101 680
R102 1.5K
C7 0.01
C8 22/16
R6 150 (1/8W)
EDG 0.68
EM-K 1.2
L1
R3 4.7K
R5 470
C3 0.0022
TR1 2SC2480
C2 0.0022
R7 4.7K
FL1 K2960M
C1 0.0022
R2 820
R4 27
C6 0.0022
C5 0.01
C4 0.22 (J) [M]
R8 22K
VR1 22K AGC ADJ.
R1 39
TR4 2SB709A
R19 470
R18 560
EDG A18P (J)
EM-K A12P (J)
C12
L6 39
R16 100
R17
EDG 3.0K
EM-K 2.4K
C14 2.2/50
R15 1K
TR3 2SD601A
FL2
EDG TPS6.5MB
EM-K TPS5.5MB
R14 (1/8W)
EDG 240
EM-K 120
L5
EDG 8.2
EM-K 5.6
FL3 TPS5.5MW
FL4 TPWA01B
EM-K ONLY
R63 470
TR52 2SD601A
R58 56K
R57 47K
X1 CSB512P
C56 SL330P (J)
C60 0.1 /25
C58 0.01
R59 820
C57 SL560P (J)
C13 0.01
R60 10K
L52 220
R56 470
C54 A82P (J)
C55 10/16
C59 SL330P (J)
R55 330
L51 8.2
R53 56K
R61 5.6K
R62 47K
TR51 2SD601A
C52 0.01
C53 0.1 /25
R54 2.7K
R52 39K
C51 0.01
R64 1K
TR2 2SB709A
R12 910 (1/8W)
R13 1K (1/8W)
EDG ONLY R20 560
EDG SFSH5.5MCB
EM-K SFSH6.0MCB
FL52
R51 1K
FL51 SFSH6.5MCB
R22 360
FL54 SFSH5.5MCB
EM-K ONLY
3.2V
9.0V
9.0V
2.4V
2.4V
2.8V
4.9V
4.9V
3.6V
5.4V
5.4V
4.3V
4.8V
4.8V
2.7V
4.4V
3.5V
7.4V
1.0V
0.3V
3.5V
4.2V
3.5V
4.1V
9.0V
7.4V
2.9V
2.4V
8.4V
3.4V
2.8V
3.5V
4.1V
VIF-EDG PCB
F5001A5030
P1
7 A.OUT
6 +9V
5 IF.IN
4 GND
3 V.OUT
2 AGC.OUT
1 AFT.OUT
TO MAIN PCB 2/4 (RF BLOCK)
A B C D E F G H
1 2 3 4 5 6

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/10W (J)
ALL CAPACITORS IN μF 50WV (K)
ALL INDUCTORS IN μH (J)
ALL ELECTROLYTIC CAPACITORS IN μF/WV (M)
▒ B (POWER SUPPLY) LINE

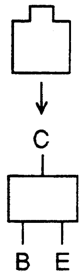
INDICATED VOLTAGES WERE MEASURED
DURING E-E (STOP) MODE.
(WHEN A STATION WAS BEING RECEIVED)

VS-G260EDG/G265EDG
VS-G460EDG/G465EDG
VIF-EDG
SCHEMATIC DIAGRAM
No.10-9 V124609M
A3

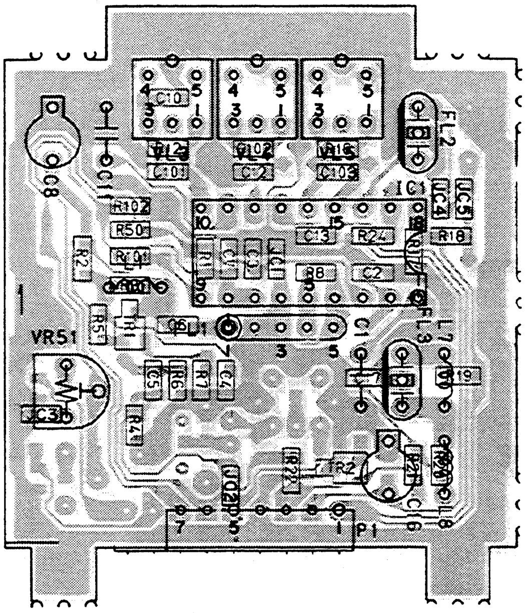

VR1
C56
R8
X1
R57
C60
R52
L52
C58
C57
R59
C59
R61
C53
R54
R52
R58
R62
C52
TR51
C51
R63
L51
R53
R56
FL53
R55
R64
FL52
FL51
VL2
VL1
VL3
C101
C102
C13
R10
C9
R9
C10
IC1
10
15
18
9
5
1
R12
R2
R22
R20
R17
C8
C7
JC2
C4
R11
L5
R6
C2
3
R5
C6
C5
R15
R16
TR3
FL4
L1
C3
FL1
R19
R14
FL3
R101
R3
TR1
R4
R2
JC1
C1
R10
C12
FL2
R102
P1
7
5
1

VIF-EDG PCB F5001A5030(N1)

SINGLE CHIP TRANSISTOR



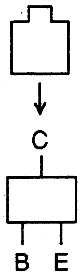
NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER.
REFER TO SCHEMATIC DIAGRAMS FOR PERTINENT
PARTS INFORMATION.

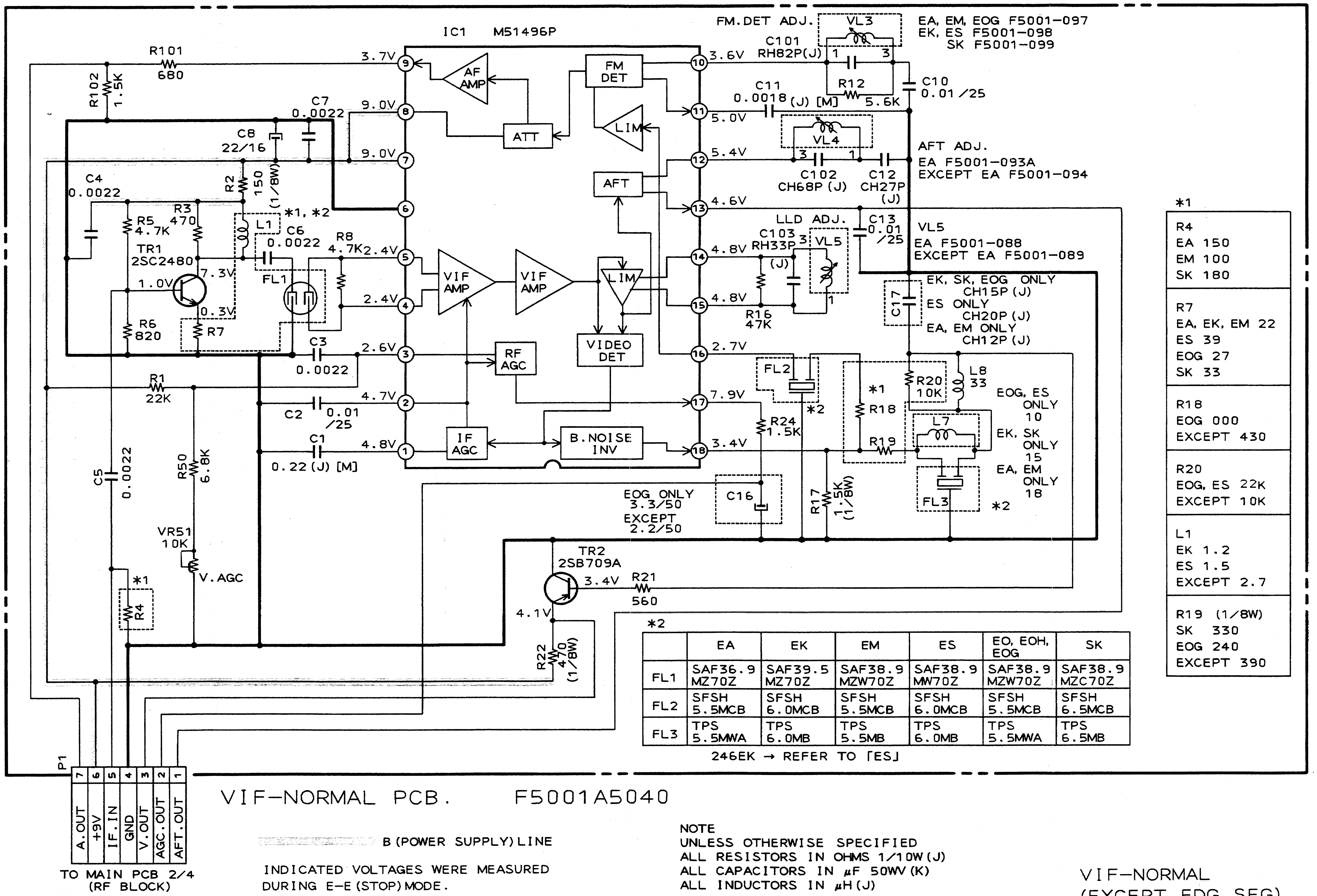

C10
C101
C2
C103
FL2
IC1
C8
C11
R102
R50
R101
R2
VR101
L1
R51
VR51
C3
C5
R6
R7
C4
R4
C13
R24
R18
C7
R8
C1
FL3
L7
R19
TR1
C6
TR2
R27
R21
R26
C15
C14
C12
L8
P1
JC2
10
9
15
3
5
7
1

VIF-NORMAL PCB F5001A5040

NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER.
REFER TO SCHEMATIC DIAGRAMS FOR PERTINENT PARTS INFORMATION.

SINGLE CHIP TRANSISTOR




IC1 M51496P
AF AMP
ATT
FM DET
LIM
AFT
VIF AMP
VIF AMP
LIM
VIDEO DET
RF AGC
IF AGC
B.NOISE INV
FM.DET ADJ.
VL3
EA, EM, EOG F5001-097
EK, ES F5001-098
SK F5001-099
C101 RH82P(J)
R12 5.6K
C10 0.01/25
C11 0.0018 (J) [M]
VL4
AFT ADJ.
EA F5001-093A
EXCEPT EA F5001-094
C102 CH68P (J)
C12 CH27P (J)
LLD ADJ.
C103 RH33P (J)
VL5
C13 0.01/25
VL5
EA F5001-088
EXCEPT EA F5001-089
R16 47K
C17
EK, SK, EOG ONLY CH15P (J)
ES ONLY CH20P (J)
EA, EM ONLY CH12P (J)
FL2
*2
R20 10K
L8 33
*1
R18
R19
L7
EOG, ES ONLY 10
EK, SK ONLY 15
EA, EM ONLY 18
R24 1.5K
R17 1.5K (1/8W)
FL3
*2
C16
EOG ONLY 3.3/50
EXCEPT 2.2/50
3.7V
9.0V
9.0V
2.4V
2.4V
2.6V
4.7V
4.8V
3.6V
5.0V
5.4V
4.6V
4.8V
4.8V
2.7V
7.9V
3.4V
R101 680
R102 1.5K
C7 0.0022
C8 22/16
R2 150 (1/8W)
C4 0.0022
R5 4.7K
R3 470
*1, *2
L1
C6 0.0022
R8 4.7K
TR1 2SC2480
1.0V
7.3V
0.3V
FL1
R6 820
R7
C3 0.0022
R1 22K
C2 0.01/25
C1 0.22 (J) [M]
C5 0.0022
R50 6.8K
VR51 10K
V.AGC
*1
R4
TR2 2SB709A
3.4V
R21 560
4.1V
R22 470 (1/8W)
P1
7 6 5 4 3 2 1
A.OUT
+9V
IF.IN
GND
V.OUT
AGC.OUT
AFT.OUT
TO MAIN PCB 2/4 (RF BLOCK)

*1

R4 EA 150 EM 100 SK 180
R7 EA, EK, EM 22 ES 39 EOG 27 SK 33
R18 EOG 000 EXCEPT 430
R20 EOG, ES 22K EXCEPT 10K
L1 EK 1.2 ES 1.5 EXCEPT 2.7
R19 (1/8W) SK 330 EOG 240 EXCEPT 390

*2

	EA	EK	EM	ES	EO, EOH, EOG	SK
FL1	SAF36.9 MZ70Z	SAF39.5 MZ70Z	SAF38.9 MZW70Z	SAF38.9 MW70Z	SAF38.9 MZW70Z	SAF38.9 MZC70Z
FL2	SFSH 5.5MCB	SFSH 6.0MCB	SFSH 5.5MCB	SFSH 6.0MCB	SFSH 5.5MCB	SFSH 6.5MCB
FL3	TPS 5.5MWA	TPS 6.0MB	TPS 5.5MB	TPS 6.0MB	TPS 5.5MWA	TPS 6.5MB

246EK → REFER TO ⌈ES⌋

VIF–NORMAL PCB. F5001A5040

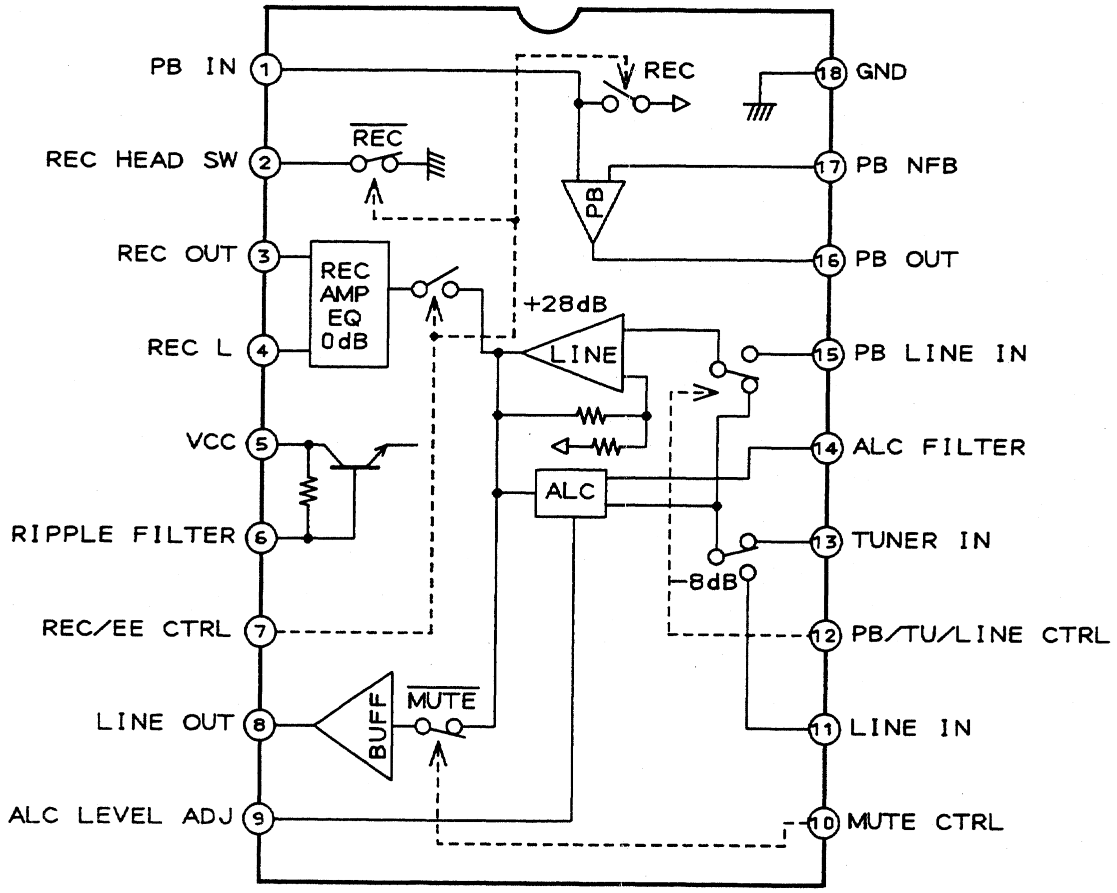
▨ B (POWER SUPPLY) LINE

INDICATED VOLTAGES WERE MEASURED
DURING E–E (STOP) MODE.
(WHEN A STATION WAS BEING RECEIVED)

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/10W (J)
ALL CAPACITORS IN μF 50WV (K)
ALL INDUCTORS IN μH (J)
ALL ELECTROLYTIC CAPACITORS
IN μF/WV (M)

VIF–NORMAL
(EXCEPT EDG, SEG)
SCHEMATIC DIAGRAM
No.10–10 V122208M
A3

BA7797 (AUDIO REC/PB AMP)


PB IN ①
REC HEAD SW ②
REC OUT ③
REC L ④
VCC ⑤
RIPPLE FILTER ⑥
REC/EE CTRL ⑦
LINE OUT ⑧
ALC LEVEL ADJ ⑨
⑱ GND
⑰ PB NFB
⑯ PB OUT
⑮ PB LINE IN
⑭ ALC FILTER
⑬ TUNER IN
⑫ PB/TU/LINE CTRL
⑪ LINE IN
⑩ MUTE CTRL
REC
$\overline{\text{REC}}$
PB
REC AMP EQ 0dB
+28dB
LINE
ALC
-8dB
BUFF
$\overline{\text{MUTE}}$

CONTROL SWITCH FUNCTION TABLE

(1) REC/EE & PB/TU/LINE CONTROLS

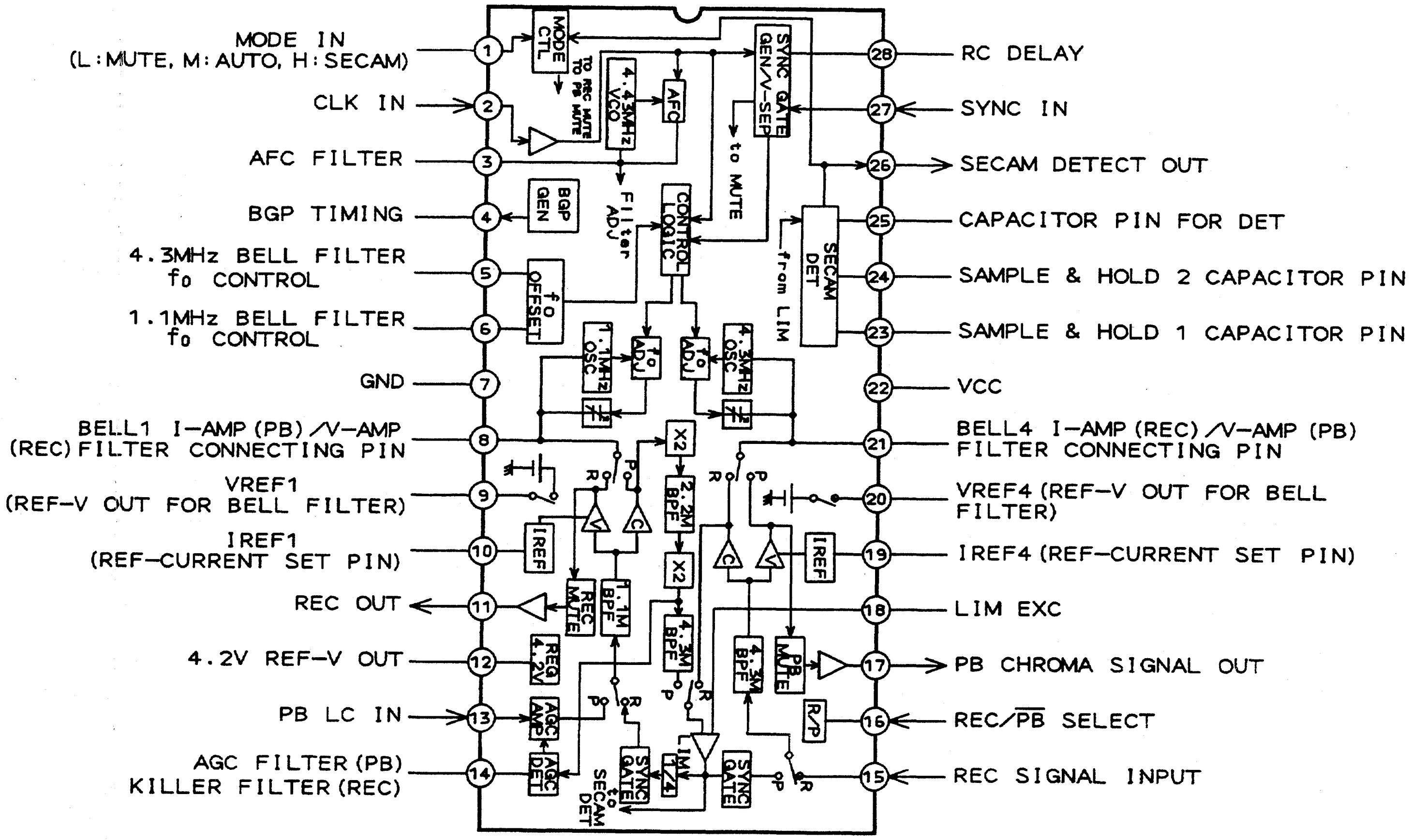
CONTROL PIN		MODE	FUNCTION			
REC/EE (⑦ PIN)	PB/TU/LI (⑫ PIN)		PB HEAD SW	REC HEAD SW	LINE SW	REC AMP
L	L	LINE	OFF	ON	LINE	OFF
L	M	TUNER	OFF	ON	TUNER	OFF
L	H	PB	OFF	ON	PB	OFF
H	L	LINE REC	ON	OFF	LINE	ON
H	M	TU REC	ON	OFF	TUNER	ON
H	H	inhibit	–	–	–	–

※ REC/EE : M → REC PAUSE MODE (REC HEAD SW : OPEN, REC AMP : OFF)

(2) MUTE CONTROL

CONTROL PIN	MODE	FUNCTION
MUTE (⑩ PIN)		LINE SW
H	MUTE	OPEN
L	$\overline{\text{MUTE}}$	CLOSE

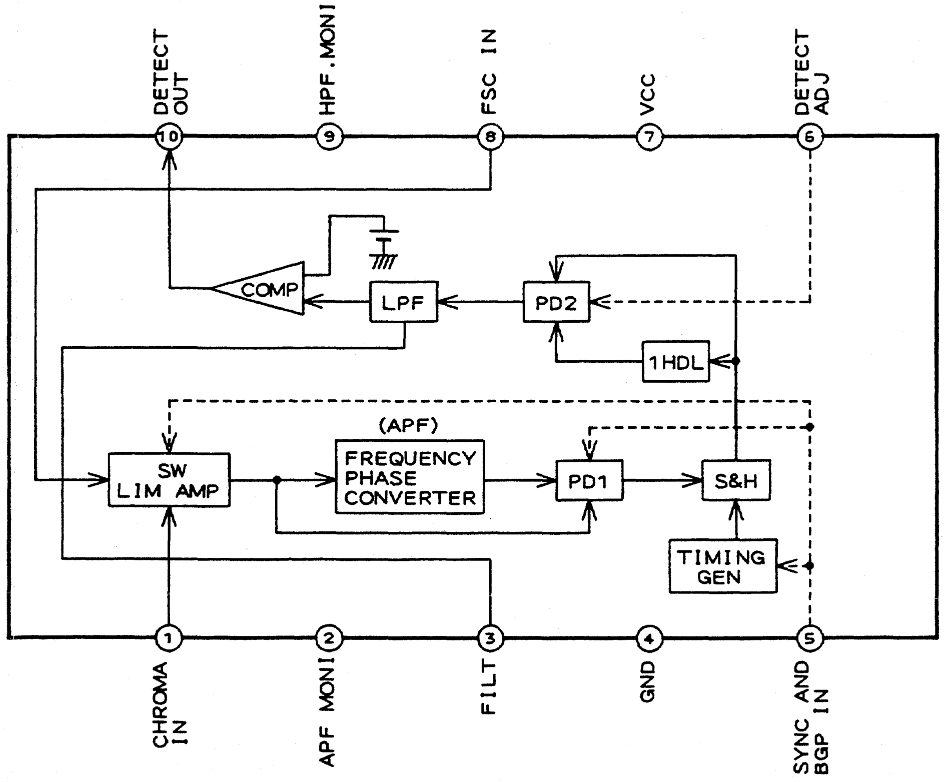
LA7337 (SECAM CHROMA SIGNAL PROCESSOR)


MODE IN (L:MUTE, M:AUTO, H:SECAM) ①
CLK IN ②
AFC FILTER ③
BGP TIMING ④
4.3MHz BELL FILTER fo CONTROL ⑤
1.1MHz BELL FILTER fo CONTROL ⑥
GND ⑦
BELL1 I-AMP (PB)/V-AMP (REC) FILTER CONNECTING PIN ⑧
VREF1 (REF-V OUT FOR BELL FILTER) ⑨
IREF1 (REF-CURRENT SET PIN) ⑩
REC OUT ⑪
4.2V REF-V OUT ⑫
PB LC IN ⑬
AGC FILTER (PB) KILLER FILTER (REC) ⑭
㉘ RC DELAY
㉗ SYNC IN
㉖ SECAM DETECT OUT
㉕ CAPACITOR PIN FOR DET
㉔ SAMPLE & HOLD 2 CAPACITOR PIN
㉓ SAMPLE & HOLD 1 CAPACITOR PIN
㉒ VCC
㉑ BELL4 I-AMP (REC)/V-AMP (PB) FILTER CONNECTING PIN
⑳ VREF4 (REF-V OUT FOR BELL FILTER)
⑲ IREF4 (REF-CURRENT SET PIN)
⑱ LIM EXC
⑰ PB CHROMA SIGNAL OUT
⑯ REC/$\overline{\text{PB}}$ SELECT
⑮ REC SIGNAL INPUT
MODE CTL
4.43MHz VCO
AFC
SYNC GATE GEN/V-SEP
to MUTE
BGP GEN
Filter ADJ
CONTROL LOGIC
fo OFFSET
SECAM DET
from LIM
1.1MHz OSC
fo ADJ
4.3MHz OSC
X2
2.2M BPF
IREF
REC MUTE
1.1M BPF
4.3M BPF
PB MUTE
REG 4.2V
AGC AMP
AGC DET
R/P
SYNC GATE
to SECAM DET
LIM
1/4

* PIN ⑥ : H (5V) → TEST MODE

⑤ PIN : 4.43MHz VCO OUT
⑪ PIN : 1.1MHz BPF OUT
⑰ PIN : 4.3MHz BPF OUT
㉖ PIN : BGP MONITOR OUT

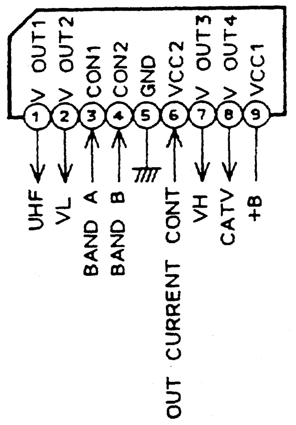
LA7356 (PAL/SECAM DETECTOR)


DETECT OUT ⑩
HPF.MONI ⑨
FSC IN ⑧
VCC ⑦
DETECT ADJ ⑥
COMP
LPF
PD2
1HDL
(APF)
SW LIM AMP
FREQUENCY PHASE CONVERTER
PD1
S&H
TIMING GEN
① CHROMA IN
② APF MONI
③ FILT
④ GND
⑤ SYNC AND BGP IN

LA7440M/LA7447BM (Y/C SIGNAL PROCESSOR)

PIN No.	PORT NAME	I/O	FUNCTION
1	MAIN-EMPH	–	Main emphasis filter pin.
2	NL-EMPH	–	Main emphasis filter.
3	PIC-CTL/EDIT	–	Picture control (soft: 2.0 - 2.45 V, hard: 2.55 - 3.0V)/edit (3.8 V or more).
4	AGC-TC2	–	Capacitor connecting pin for AGC DET.
5	YNR-CTL	–	YNR-OFF: 1.0 V or less, YNR-CTL: 1.5 - 2.5 V, YNR-STRONG: 3.5 V or more.
6	NC-CTL	–	NC (noise cancel) off (PB): 1.5 V or less, NC-CTL (PB): 2.0 - 3.0 V.
7	VIDEO-IN	I	REC/E-E video signal input.
8	Vcc	–	+5 V power supply.
9	C-SYNC OUT	O	Composite sync signal output.
10	VCA-FILT	–	Capacitor connecting pin for VCA.
11	VIDEO-OUT	O	E-E or PB video signal out.
12	C.ROT	I	Chroma rotary pulse input.
13	VCA-IN	I	VCA AMP input.
14	QV,QH,CHA-IN	I	Quasi V-pulse & Quasi H-pulse input/character signal input.
15	CCD DRIVE	O	Y signal out pin to Y-CCD.
16	AGC-TC1/BAL	–	Capacitor connection pin for AGC-TC1 and balancer.
17	C-CCD DRIVE1	O	Chroma signal out pin to chroma CCD1.
18	M/$\overline{\text{M}}$	–	L: except NTSC (50 Hz), H: NTSC (60 Hz). (7440M only)
	NL-ON	–	L or H: NL OFF, M: NL ON (weak).
	DETAIL-ENHA	–	L or H: detail enhancer normal, M: weak & fc down.
19	C-CCD DRIVE2	O	Chroma signal out pin to chroma CCD2.
20	GND	–	Ground terminal.
21	C-CCD IN	I	Chroma signal input pin from chroma CCD.
22	MODE-CTL	–	SP: 0 - 1.2 V, LP: 2.0 - 2.7 V, EP: 3.9 - 5.0 V.
23	CHROMA-IN	I	Chroma signal input from comb filter.
	SP CS-STOP	–	H: SP carrier shift stop.
24	NAP CTL	–	NAP: 3.3 - 5.0 V, B.M out: 2.0 - 2.7 V, THRU: 0-1.2 V.
25	CHROMA-OUT	O	PB chroma signal output. H (SECAM mode): mute ON.
26	$\overline{\text{P}}$/S/N	–	Colour mode switching pin (NTSC: 3.9 - 5.0 V, MESEC: 2.0 - 2.7 V, PAL: 0-1.2V).
27	VXO-IN1	I	Crystal1 connecting pin (7440M: 3.58 MHz, 7447BM: 4.43 MHz).
28	VXO-OUT1	O	Crystal1 connecting pin (7440M: 3.58 MHz, 7447BM: 4.43 MHz).
29	REC-APC FIL	–	Capacitor connecting pin for REC APC detector.
	TRICK-H	–	3.9 V or more after COMB in SP mode.
30	XO-OUTA	O	Crystal connecting pin (4.43 MHz, 7440M only).
31	XO-OUTB	O	Crystal connecting pin.
32	VXO-IN2	I	Crystal connecting pin (4.43 MHz, 7440M only).
33	Vcc-1	–	+5 V power supply pin.
34	BGP-OUT	O	Burst gate pulse output pin.
35	FILT-CTL	–	H: 3.58 MHz, L: 4.43 MHz.
36	SLD-FILT	–	Capacitor connecting pin for SLD.
37	AFC/APC FILT	–	Capacitor connecting pin for AFC DET (REC) or APC DET (PB).
38	REC C-OUT	O	REC low chroma signal output.
	PB C-IN	I	PB low chroma signal input.
39	KILL-FILT	–	Capacitor connecting pin for killer detector.
40	KILLER-OUT	O	REC: APC killer out (H: killer ON).
	SLD-OUT	O	PB: side lock detector pulse output.
41	ACC-FILT	–	Capacitor connecting pin for ACC AMP.
42	GND	–	Ground pin.
43	PB FM-IN	I	PB-Y FM signal input.
44	MOD-OUT	O	REC-Y modulator output signal.
	DOC-STOP	–	Drop-out compensator control (H: DOC stop).
45	VREG	–	4.2 V regulator out.
46	REC-Y	O	REC-Y signal output.
	MAIN DE-EMPH OUT	O	Main de-emphasis output.
47	CLAMP	I	Clamp circuit input.
48	EMPH-OUT	–	Main emphasis out.
	R/P CTL	–	REC/PB control (PB: H).

LA7910 (TUNER BAND SELECTOR)



INPUT		OUTPUT			
CON1	CON2	V OUT1	V OUT2	V OUT3	V OUT4
L	L	H	Z	Z	Z
H	L	Z	H	Z	Z
L	H	Z	Z	H	Z
H	H	Z	Z	Z	H

Z:HIGH IMPEDANCE

LA70011 (4-CH REC/HEAD AMPLIFIER)

PIN No.	PORT NAME	I/O	FUNCTION
1	TRICK.H	I	3.0V > : trick 1 mode, 3.0 - 1.0 V : normal mode, 1.0 V < : trick 2 mode.
2	COMP-OUT	O	Comparator output for head switching between LP and SP head during search (trick) mode. (LP>SP ENV : "H") (PB : H : > 4.0V, L : < 0.7 V REC : open)
3	HA	I	SP/LP select control pin. (1.5 V > : LP mode, 1.5 V < : SP mode)
4	SW30	I	Switching pulse input (H-ch : > 1.0 V, L-ch : < 1.0 V). (SP mode : L→CH-1, H→CH-2, LP mode : L→CH-2, H→CH-1)
5	H-SYNC	I	H sync input pin. (threshold level : 1.5 V)
6	ENVDET-OUT	O	Envelope detect output for auto tracking.
7	PB-OUT	O	PB Y-FM signal output.
8,20	GND	–	Ground pin.
9	REC-Y IN	I	REC Y-FM signal input pin.
10	REC-C IN	I	REC chroma signal input pin.
11	REC/MUTE/PB	I	REC/REC mute/PB control pin. 1.0 V < : PB mode, 1.0V - 3.0 V : REC (mute) mode, 3.0 V > : REC mode.
12	REC.CUR ADJ2	I	REC current adjust pin. REC current can be adjusted within –6.0 dB to +3.5 dB from the value that is set at 14 pin (REC.CUR ADJ1).
13	Vcc	–	Power supply of this IC.
14	REC.CUR ADJ1	I	If 12 pin is open, REC current is set by the resistor that is connected between 13 pin and this pin.
15	REC AGC FILT	–	Capacitor connecting pin for REC AGC circuit.
16	SP CH-1 IN	I	PB : SP channel-1 head AMP input. (REC : Vcc output)
17	REC SP OUT	O	REC SP pull down output.
18	PB FILT	I	This pin will be internally grounded on PB mode.
19	SP CH-2 IN	I	PB : SP channel-2 head AMP input. (REC : Vcc output)
21	LP CH-2 IN	I	PB : LP channel-2 head AMP input. (REC : Vcc output)
22	REC LP OUT	O	REC LP pull down output.
23	PB FILT	I	This pin will be internally grounded on PB mode.
24	LP CH-1 IN	I	PB : LP channel-1 head AMP input. (REC : Vcc output)

LC74783JM (ON SCREEN DISPLAY CONTROLLER)

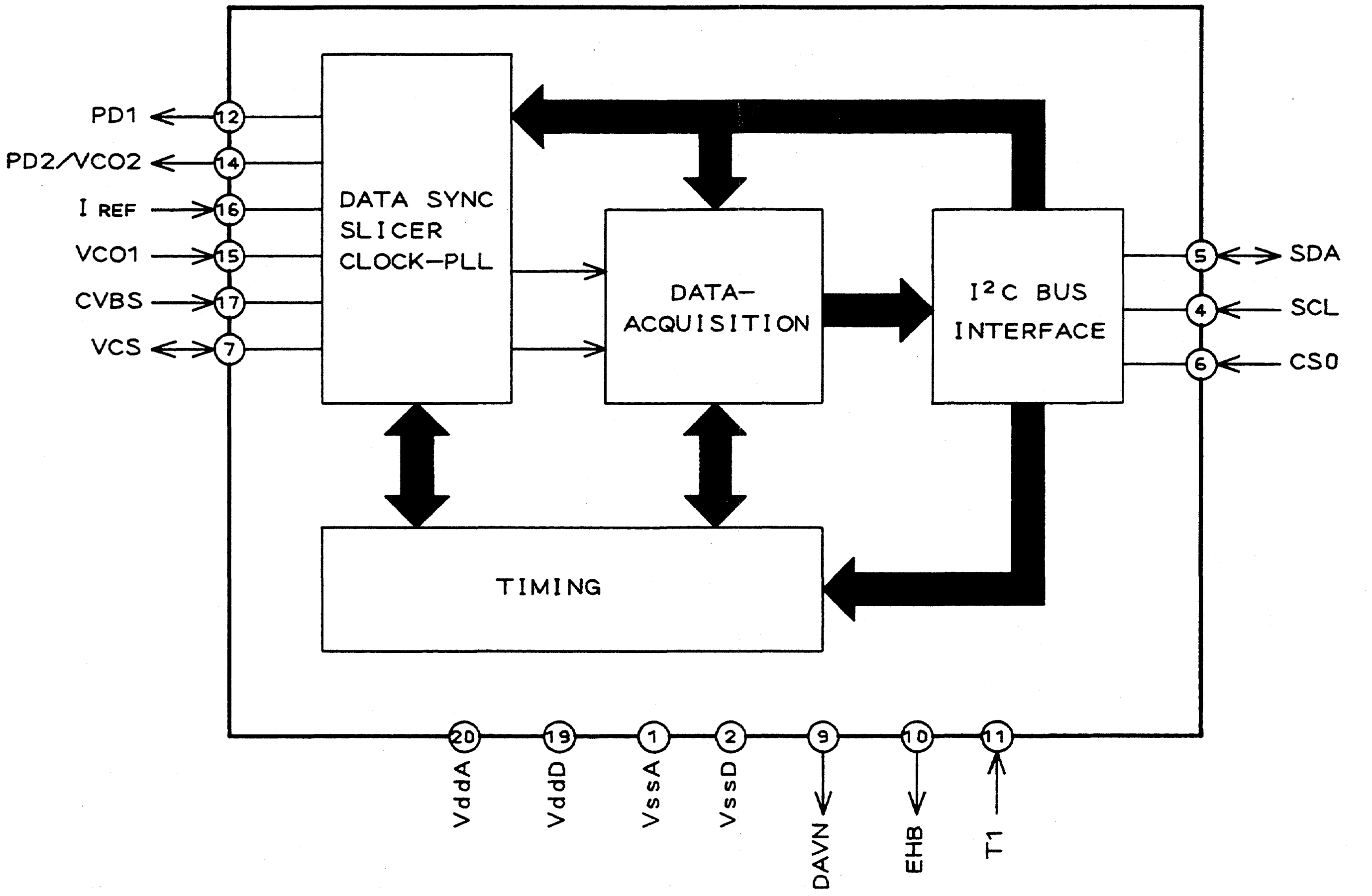
PIN No.	PORT NAME	I/O	FUNCTION
1	Vss1	–	Ground pin of this IC.
2	XTAL.IN	I	Crystal connecting pin or external clock input pin for internal SYNC signal generator.
3	XTAL.OUT	O	
4	CTRLI	–	Selection of external clock mode or crystal oscillator mode for internal SYNC signal generator. (L : crystal, H : external clock)
5	BLANK	O	Blank signal (OR signal of character and its back ground) output.
6	OSC.IN	I	Inductor and capacitor connecting pin for the dot clock oscillator of the character output.
7	OSC.OUT	O	
8	CHARA	O	Character output pin.
9	CS	I	Chip enable input pin. (L : serial data input enable)
10	SCLK	I	Serial clock input pin.
11	S.IN	I	Serial data input pin.
12	Vdd2	–	Power supply for the composite video signal level adjustment. (Analog section)
13	CV.OUT	O	Composite video signal output pin.
14	N.C	–	Not used.
15	CV.IN	I	Composite video signal input pin.
16	CV.CR	I	SECAM chroma signal input pin.
17	Vdd1	–	+5 V power supply pin for digital section.
18	SYN.IN	I	Video signal input pin for the internal SYNC separator.
19	SEP.C	–	Bias voltage monitoring pin of the internal SYNC separator circuit.
20	SEP.OUT	O	Composite SYNC signal output pin.
21	SEP.IN	I	V-sync input pin from the SEP.OUT pin via integration circuit. This pin must be connected to the Vdd1 when not using this facility.
22	CTRL3	I	Selection, whether input the V-sync to the SEP.IN or not. (L : input V-sync, H : never input V-sync)
23	RST	I	Reset signal input pin.
24	Vdd1	–	+5 V power supply pin for digital section.

M37777M9-EXGSYP/EXGSYS/EXGSYN (SYSTEM CONTROL & SERVO MI-COM)

PIN No.	PORT NAME	I/O	FUNCTION
1	SS	I	Start sensor input.
2	ES	I	End sensor input.
3	NT.TRICK	O	NTSC trick mode control pin.
4	TV/VCR	O	TV/VIDEO select control output.
5	BAND A	O	Tuner band select output.
6	BAND B	O	
7	WS/DEC J	I	Wide screen, decoder judge signal input. (2V> : not scrambled, 2 - 4 V : wide screen, >4 V : scrambled)
8	S/L/E	O	Circuit switching regarding the tape speed (SP : L, LP : M, EP : H).
9	I-HQ MD1	O	YNR control output.
10	V.ENV.DET	I	Video envelope detect input (for auto tracking & I-HQ).
11	PIC.CTL	O	Picture control output.
12	NC CTL	O	Noise cancel circuit control output (I-HQ).
13	VP	O	Quasi V pulse signal output.
14	REMOCON	I	Remote control signal input.
15	C.ROT	O	Chroma rotation pulse output pin.
16	HEAD CTL	O	Video head SP/LP select.
17	COMP OUT	I	Input from PRE AMP's comparator (for head select when CUE/REV).
18	V.SWP	O	Video head switching pulse output.
19	N.C	–	
20	I-HQ MD2	O	NC control output according to the V - ENVE level.
21	MODU	O	RF converter on/off control.
22	AFT	O	AFT on/off control output (L : on, H : off).
23	VJ	O	Video judge output. (no signal : L)
24	P/S/N	O	PAL/SECAM/NTSC select control (L,M,H).
25	A.EE	O	Audio circuit mode control output. *21pin 1 scart, RCA models : H : PB, M : internal, L : external/front off *DEC C+, 21pin 2 scart models : H : PB, L : EE/front off
26	NP	O	NTSC → PAL/NTSC4.43 switching output.
27	NT3.58REC	O	NTSC 3.58MHz recording control (PAL models only).
	SECAM	O	Colour system (SECAM) control (SEG models only).
28	SEC.MES	O	SECAM/MESECAM control output.
29	REC.S	O	Video section recording on/off control.
30	CK.DET	I	4.43/3.58 NTSC judge & video judge information input.
31	EE	O	E-E mode control pin.
32	S.MUTE	O	AV.STEREO muting control.
33	CTL.A	O	Input signal selection control.
34	NUB	–	No connection.
35	NUA	–	No connection.
36	CLK SEL	I	Clock select input. (H : main & sub clock OSC are active, L : only sub clock OSC is active)
37	BU5V	–	+5 V buck up power supply.
38	X.IN	I	Main clock OSC input. (f = 16 MHz)
39	X.OUT	O	Main clock OSC output.(f = 16 MHz)
40	Vss	–	Ground pin of this IC.
41	XC IN	I	Sub clock OSC input. (f = 32.768 kHz)
42	XC OUT	O	Sub clock OSC output. (f = 32.768 kHz)
43	RESET	I	Reset input.
44	TRICK	O	H when trick mode.
45	EE	O	E-E mode control pin.
46	WS	O	Wide screen control output. (H → 16 : 9 wide)
47	CTL.B	O	Input signal control output.
48	AV.S	O	AV.STEREO on/off control output.
49	SP	O	Circuit control regarding the tape speed.
50	S.DET	I	SECAM(MESECAM) judge input. (SECAM/MESECAM : H)
51	NTSC	O	NTSC/PAL,MESECAM,SECAM select output.
52	A.OSC	O	Normal audio & FE oscillator control.
53	A.NT.REC	O	Audio control output. (NTSC SP mode : L)
54	LDS	O	Audio loudness control output.(L : loudness on)
55	A.MUTE	O	Audio mute control (H : mute).

PIN No.	PORT NAME	I/O	FUNCTION
56	$\overline{\text{P.DOWN}}$	I	Power down detect input.
57	$\overline{\text{AL}}$	O	AL (always) power supply line control output.
58	TRQ.UP	O	Loading motor drive torque control output.
59	LM F	O	Loading motor direction control. (forward)
60	LM R	O	Loading motor direction control. (reverse)
61-63	RSW1~3	I	Input from the rotary (MECHA. position detect) switch 1~3.
64	$\overline{\text{CTL.GAIN}}$	O	CTL AMP gain control during FF/RWD mode. (FF/RWD : L)
65	DAVN	I	VPS/PDC reception signal input.
66	STB	O	Strobe pulse output to the OPE/FLD MI-COM.
67	CS	O	Chip select output to the OSD IC.
68	SYS.SO	O	Serial data output to the OPE/FLD MI-COM and OSD IC.
69	SYS.SI	I	Serial data input from the OPE/FLD MI-COM.
70	SCLK	O	Serial clock output to the OPE/FLD MI-COM and OSD IC.
71	SCL	O	I^{2}C BUS serial clock output.
72	SDA	I/O	I^{2}C BUS serial data input/output.
73	C.SYNC	I	Composite sync input.
74	CM STOP	O	Capstan motor stop control.
75	$\overline{\text{F}}$/R	O	Capstan motor direction control. ($\overline{\text{FWD}}$/REV)
76	TU PWM	O	Tuning voltage output for tuner. (PWM)
77	CM PWM	O	Capstan motor's speed & phase error output. (PWM)
78	DM PWM	O	Drum motor's speed & phase error output. (PWM)
79	SRP	I	Supply reel pulse input.
80	TRP	I	Take up reel pulse input.
81	Hi-SPEED	O	Capstan motor drive power supply control.
82	$\overline{\text{SHORT}}$	I	Power supply abnormal condition detect input. (L : REG voltage is too high or too low.)
83	REC SAF	I	REC safety switch input.
84	C.SYNC	I	Composite sync input. (for internal V-sync separation)
85	CAP FG	I	Capstan motor FG signal input.
86	DM PG	I	Drum motor PG signal input.
87	DM FG	I	Drum motor FG signal input.
88	AMP VSS	–	Ground for AMP
89	VREF.OUT	O	Reference voltage output for analog AMP.
90	VREF.IN	I	Reference voltage input for analog AMP.
91	CTL–	I/O	CTL negative side input/output.
92	CTL+	I/O	CTL positive side input/output.
93	CTL +SW OUT	O	CTL switched output.
94	CTL AMP IN	I	CTL AMP input.
95	AMP C	–	Capacitor connecting pin for the AMP.
96	CTL VSS	–	Ground for CTL power supply.
97	CTL AMP OUT	O	CTL AMP output.
98	AMPVcc	–	+5 V power supply input for the AMP.
99	AVcc	–	Reference voltage input for the A/D and D/A converter.
100	AFT E	I	AFT error signal (analog) input when tuning.

SDA5649X (PDC/VPS DECODER)

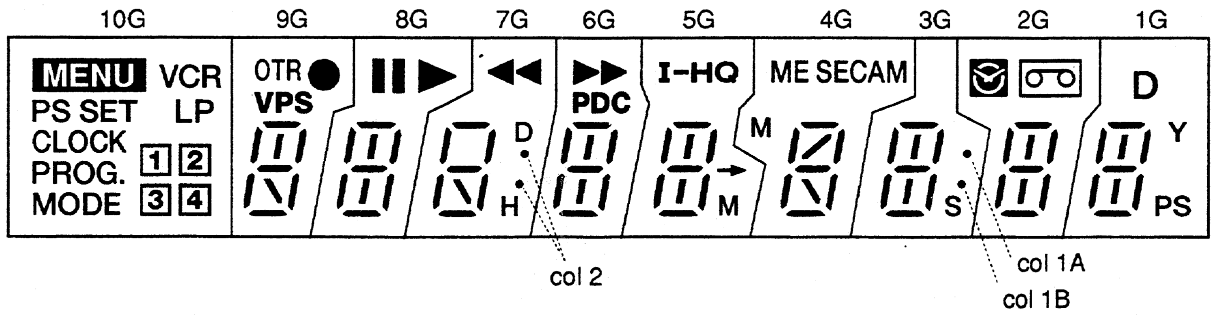


SDA5649X (PDC/VPS DECODER)

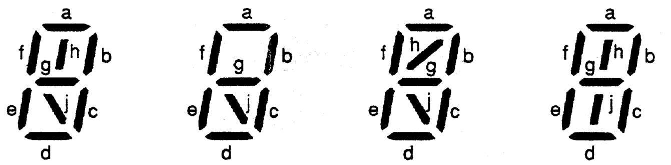
PIN No.	PORT NAME	I/O	FUNCTION
1	VSSA	–	Analog ground.
2	VSSD	–	Digital ground.
3	N.C.	–	No connection.
4	SCL	I	I^{2}C bus clock input.
5	SDA	I/O	I^{2}C bus data in/output.
6	CSO	I	Hardware address select pin of this IC (L : 20H/21H, H : 22H/23H).
7	VCS	I/O	Sliced video composite sync from CVBS signal.
8	N.C.	–	No connection.
9	DAVN	O	Data flag output (when a PDC/VPS data is received L).
10	EHB	O	First field flag output (during first field of the frame → H).
11	T1	I	Test mode control (H : test mode).
12	PD1	O	Phase detector/charge pump output for data PLL (DAPLL).
13	N.C.	–	No connection.
14	PD2/VCO2	O	Loop filter for PLL system.
15	VCO1	I	VCO input for data PLL.
16	IREF	I	Reference current input for analog circuit of this IC.
17	CVBS	I	CVBS signal input.
18	N.C.	–	No connection.
19	VDDD	–	Power supply for digital circuit (+5 V).
20	VDDA	–	Power supply for analog circuit (+5 V).

FLD FV681G

GRID ASSIGNMENT



10G
9G
8G
7G
6G
5G
4G
3G
2G
1G
MENU VCR
PS SET LP
CLOCK
PROG. 1 2
MODE 3 4
OTR
VPS
PDC
I-HQ
ME SECAM
D
Y
D
H
M
M
S
PS
col 2
col 1A
col 1B



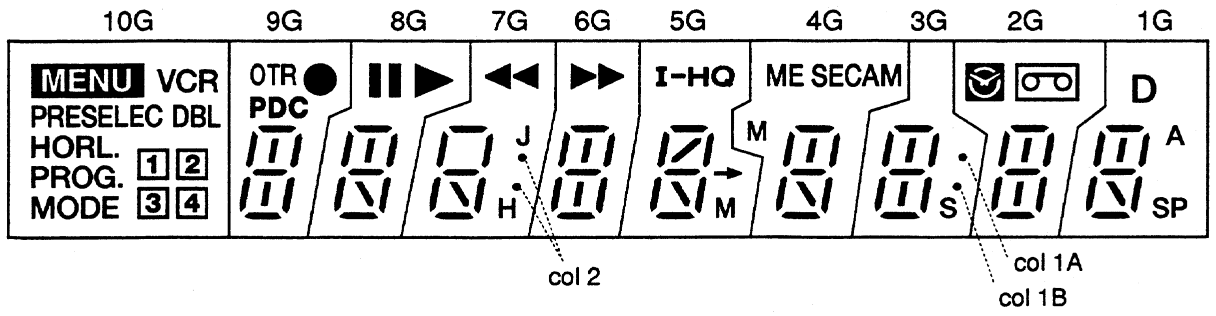
(9G) (7G) (4G) (8,6,5,3,2,1G)

ANODE CONNECTION

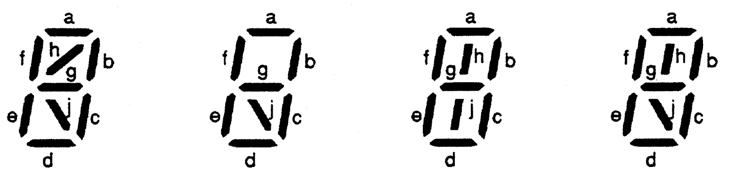
	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	MENU	a	a	a	a	a	a	a	a	a
P2	1	b	b	b	b	b	b	b	b	b
P3	3	c	c	c	c	c	c	c	c	c
P4	CLOCK	d	d	d	d	d	d	d	d	d
P5	MODE	e	e	e	e	e	e	e	e	e
P6	2	f	f	f	f	f	f	f	f	f
P7	4	g	g	g	g	g	g	g	g	g
P8	PS SET	h	h	col 2	h	h	h	h	h	h
P9	PROG.	j	j	j	j	j	j	j	j	j
P10	VCR	OTR	⁞▮	◀◀	▶▶	I-HQ	ME	S	⏲	D
P11	LP	VPS	▮⁞	D	PDC	→	M	col 1A	🖭	Y
P12	—	●	▶	H	—	M	SECAM	col 1B	—	PS

FLD FV683G

GRID ASSIGNMENT



10G
9G
8G
7G
6G
5G
4G
3G
2G
1G
MENU VCR
PRESELEC DBL
HORL.
PROG. 1 2
MODE 3 4
OTR
PDC
I-HQ
ME SECAM
D
A
J
H
M
M
S
SP
col 2
col 1A
col 1B



(5G) (7G) (9G,6G,3G,2G) (8G,4G,1G)

ANODE CONNECTION

	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	MENU	a	a	a	a	a	a	a	a	a
P2	1	b	b	b	b	b	b	b	b	b
P3	3	c	c	c	c	c	c	c	c	c
P4	HORL.	d	d	d	d	d	d	d	d	d
P5	MODE	e	e	e	e	e	e	e	e	e
P6	2	f	f	f	f	f	f	f	f	f
P7	4	g	g	g	g	g	g	g	g	g
P8	PRESELEC	h	h	col 2	h	h	h	h	h	h
P9	PROG.	j	j	j	j	j	j	j	j	j
P10	VCR	OTR	⁞▮	◀◀	▶▶	I-HQ	ME	S	⏲	D
P11	DBL	PDC	▮⁞	J	—	→	M	col 1A	🖭	A
P12	—	●	▶	H	—	M	SECAM	col 1B	—	SP